

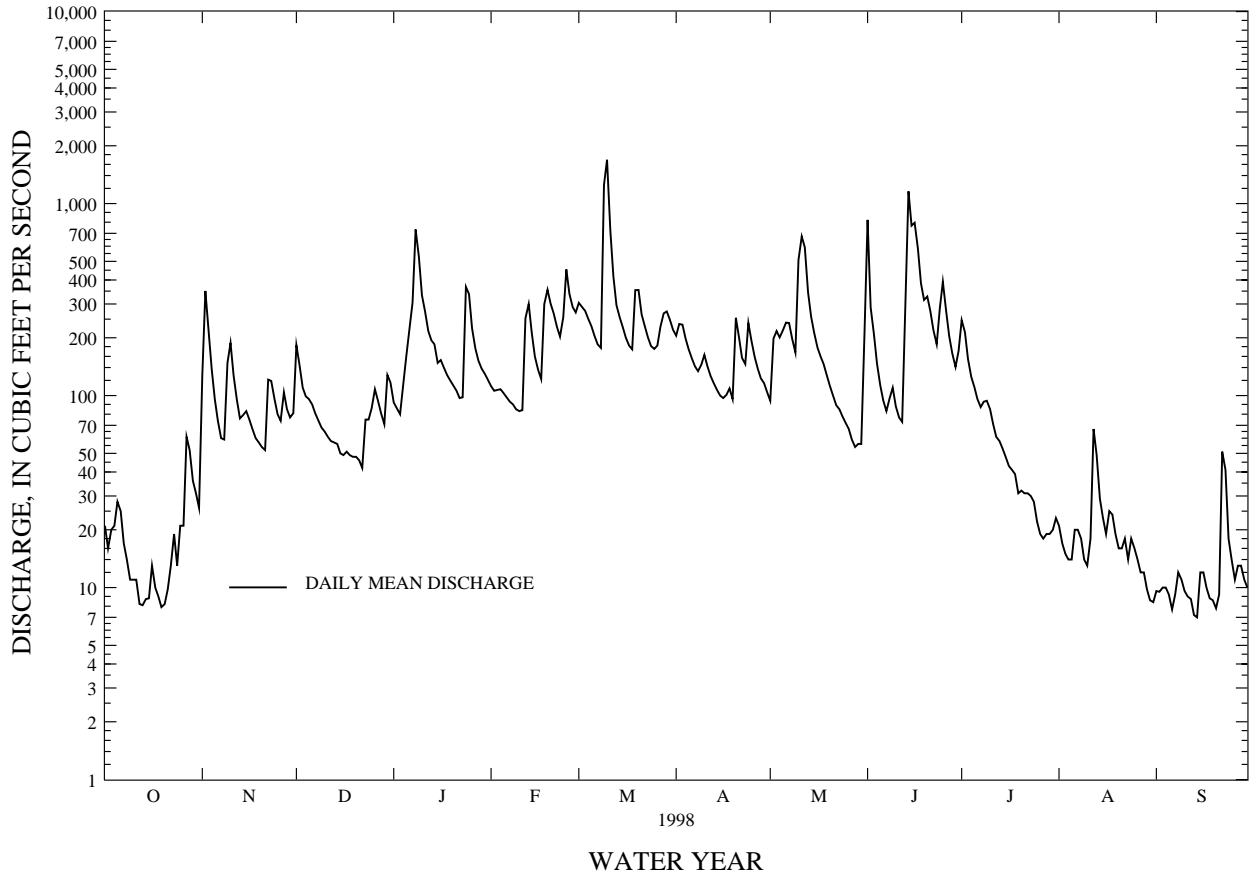


MERRIMACK RIVER BASIN

01094400 NORTH NASHUA RIVER AT FITCHBURG, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1973 - 1998	
ANNUAL TOTAL	38411.4		51245.6		124	
ANNUAL MEAN	105		140		169	
HIGHEST ANNUAL MEAN					1973	
LOWEST ANNUAL MEAN					59.5	
HIGHEST DAILY MEAN	870	Apr 19	1690	Mar 10	2830	Apr 5 1987
LOWEST DAILY MEAN	7.9	Oct 19	7.0	Sep 14	2.7	Sep 5 1995
ANNUAL SEVEN-DAY MINIMUM	9.4	Oct 13	9.2	Aug 31	4.3	Aug 31 1995
INSTANTANEOUS PEAK FLOW			2570	Mar 9	3510	Apr 5 1987
INSTANTANEOUS PEAK STAGE			7.32	Mar 9	9.25	Apr 5 1987
INSTANTANEOUS LOW FLOW			5.7	Sep 7	1.5	Sep 11 1995
10 PERCENT EXCEEDS	228		288		262	
50 PERCENT EXCEEDS	79		96		80	
90 PERCENT EXCEEDS	12		12		22	

NORTH NASHUA RIVER AT FITCHBURG, MA 01094400



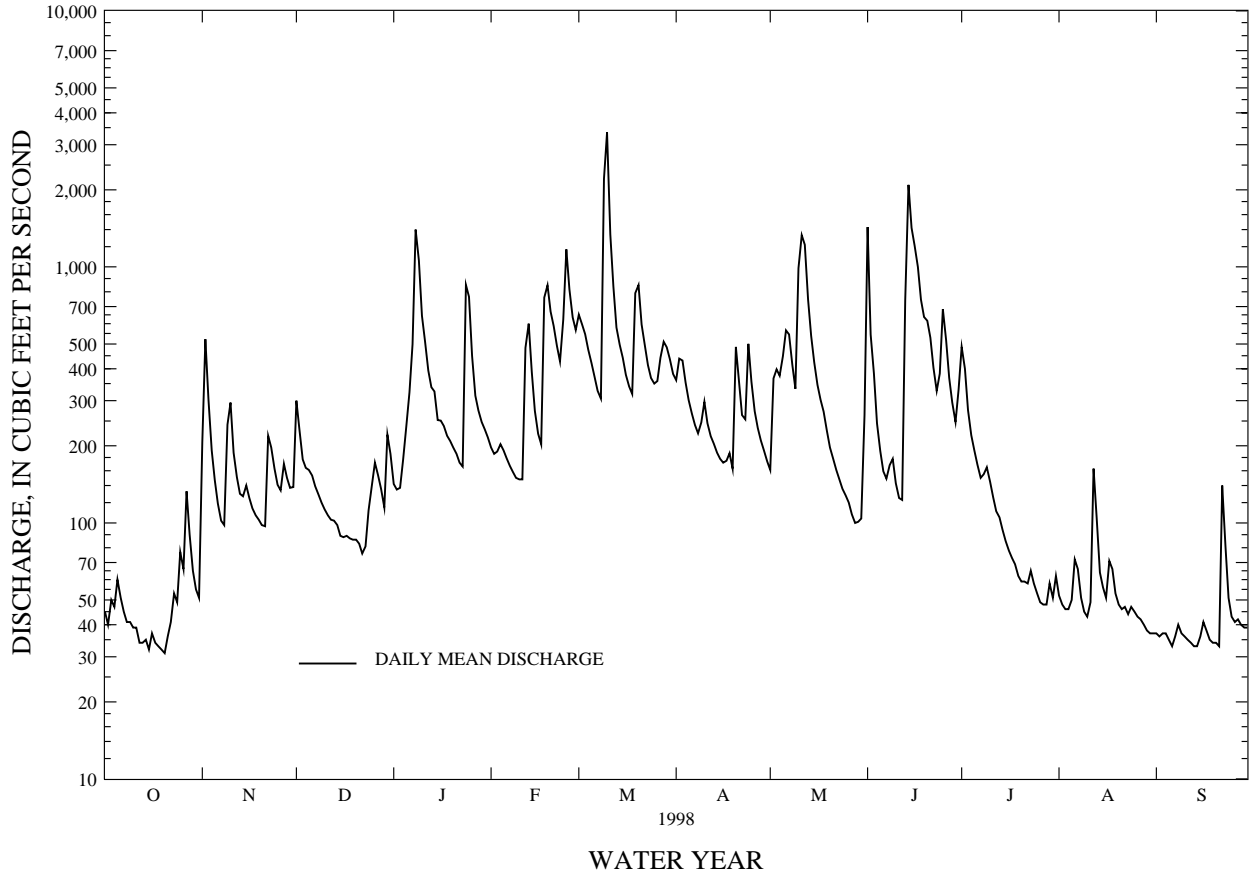


MERRIMACK RIVER BASIN

01094500 NORTH NASHUA RIVER NEAR LEOMINSTER, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1935 - 1998	
ANNUAL TOTAL	74743		97520		201	
ANNUAL MEAN	205		267		307	
HIGHEST ANNUAL MEAN					81.2	
LOWEST ANNUAL MEAN					1956	
HIGHEST DAILY MEAN	1610	Apr 19	3350	Mar 10	7530	Mar 18 1936
LOWEST DAILY MEAN	31	Sep 28	31	Oct 20	22	Sep 27 1936
ANNUAL SEVEN-DAY MINIMUM	33	Sep 22	33	Oct 14	24	Aug 28 1936
INSTANTANEOUS PEAK FLOW			4950	Mar 10	16300	Mar 18 1936
INSTANTANEOUS PEAK STAGE			7.12	Mar 10	20.53	Mar 18 1936
INSTANTANEOUS LOW FLOW			26	Oct 19	11	Aug 29 1948
10 PERCENT EXCEEDS	440		591		422	
50 PERCENT EXCEEDS	138		163		126	
90 PERCENT EXCEEDS	39		40		49	

NORTH NASHUA RIVER NEAR LEOMINSTER, MA 01094500



## MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA

LOCATION.--Lat 42°24'39", long 71°47'30", Worcester County, Hydrologic Unit 01070004, on left bank at downstream side of bridge on Muddy Pond Road, 1.5 mi upstream of mouth and 2.5 mi southwest of Sterling.

DRAINAGE AREA.--31.6 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Low-flow partial-record measurements in water years 1971-73, 1991-93. April 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharge, which are poor.

AVERAGE DISCHARGE.--4 years, 62.3 ft<sup>3</sup>/s, 26.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 890 ft<sup>3</sup>/s, Jan. 28, 1996, gage height, 8.50 ft from rating curve extended above 340 ft<sup>3</sup>/s; minimum, 0.14 ft<sup>3</sup>/s, Sept. 11, 12, 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 750 ft<sup>3</sup>/s (estimated), Mar. 10, gage height, 8.06 ft; minimum, 0.81 ft<sup>3</sup>/s, Oct. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	17	76	e40	61	175	70	40	101	168	12	2.7
2	1.1	113	84	41	56	168	103	67	82	123	9.2	2.7
3	1.4	96	57	34	57	144	109	98	68	79	6.5	2.9
4	2.1	58	45	45	58	127	91	101	52	57	5.4	2.8
5	3.3	37	43	e88	57	113	76	115	38	46	19	2.7
6	3.3	27	43	e123	51	100	68	127	30	38	10	2.3
7	2.8	21	37	e198	47	90	60	129	27	33	7.6	2.5
8	2.3	19	32	e372	45	84	56	106	27	32	5.6	2.6
9	1.8	36	27	e350	40	e350	70	89	33	35	4.3	2.4
10	1.7	93	26	235	40	e640	89	236	28	31	3.9	2.3
11	1.6	68	24	176	40	e360	85	404	23	25	3.9	2.2
12	1.8	45	22	133	103	249	65	370	21	22	4.2	2.1
13	2.8	32	22	109	174	161	58	232	103	20	4.8	2.1
14	12	29	20	104	116	135	e52	157	362	18	5.9	2.1
15	4.4	30	e18	83	e82	119	47	119	348	16	6.0	2.0
16	2.7	27	18	75	65	105	44	97	214	14	5.7	1.9
17	2.2	24	18	75	59	94	46	80	247	13	5.9	1.7
18	2.1	22	18	69	160	89	51	73	226	13	6.0	1.6
19	1.5	20	17	64	253	155	43	63	183	33	6.5	1.5
20	1.6	18	17	60	191	285	92	54	201	13	5.4	1.4
21	1.7	17	16	55	161	202	98	49	186	9.8	4.0	1.3
22	1.7	35	e16	51	137	152	71	43	125	8.4	3.3	2.4
23	1.7	62	e18	46	119	124	60	38	94	7.9	3.1	3.2
24	1.8	48	e23	e163	137	109	111	34	80	8.9	3.1	3.0
25	3.0	37	24	e247	278	104	101	31	121	6.7	3.0	2.9
26	5.9	31	32	e160	243	101	74	29	102	4.5	3.3	3.0
27	21	39	34	e130	183	110	63	26	78	4.5	3.1	3.1
28	24	43	34	90	157	120	54	24	63	4.5	2.9	2.6
29	16	36	e32	81	---	106	49	22	52	5.0	2.8	2.2
30	10	32	36	75	---	90	44	23	82	6.5	2.9	1.9
31	8.3	---	38	69	---	78	---	25	---	12	2.9	---
TOTAL	148.9	1212	967	3641	3170	5039	2100	3101	3397	907.7	172.2	70.1
MEAN	4.80	40.4	31.2	117	113	163	70.0	100	113	29.3	5.55	2.34
MAX	24	113	84	372	278	640	111	404	362	168	19	3.2
MIN	1.1	17	16	34	40	78	43	22	21	4.5	2.8	1.3
CFSM	.15	1.28	.99	3.72	3.58	5.14	2.22	3.17	3.58	.93	.18	.07
IN.	.18	1.43	1.14	4.29	3.73	5.93	2.47	3.65	4.00	1.07	.20	.08

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

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	35.8	59.5	86.3	112	87.3	110	112	71.0	37.0	19.9	10.9	9.76
MAX	83.8	106	171	157	120	163	172	100	113	34.4	29.1	22.5
(WY)	1997	1996	1997	1996	1996	1998	1997	1998	1998	1996	1994	1996
MIN	4.80	25.9	31.2	76.0	44.8	84.3	46.1	34.8	15.3	2.92	2.72	.92
(WY)	1998	1995	1998	1997	1995	1997	1995	1995	1997	1995	1995	1995

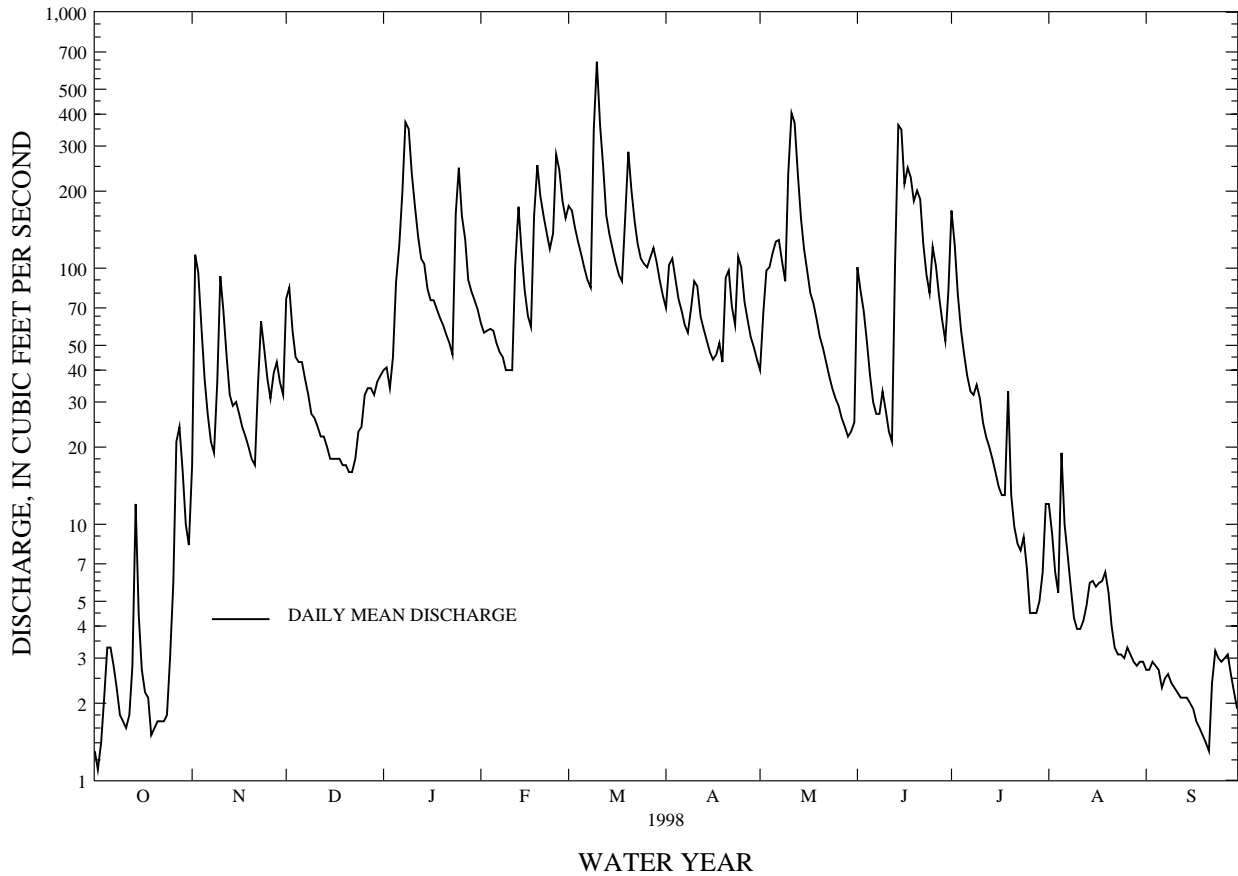
MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1994 - 1998	
ANNUAL TOTAL	17724.70	23925.9	62.3	
ANNUAL MEAN	48.6	65.6	74.9	1996
HIGHEST ANNUAL MEAN			39.5	1995
LOWEST ANNUAL MEAN			742	Jan 28 1996
HIGHEST DAILY MEAN	386 Apr 19	640 Mar 10	.24	Sep 12 1995
LOWEST DAILY MEAN	.77 Sep 28	1.1 Oct 2	.29	Sep 10 1995
ANNUAL SEVEN-DAY MINIMUM	.90 Sep 22	1.6 Sep 15	890	Jan 28 1996
INSTANTANEOUS PEAK FLOW		e750 Mar 10	8.50	Jan 28 1996
INSTANTANEOUS PEAK STAGE			.14	Sep 11 1995
INSTANTANEOUS LOW FLOW		.81 Oct 3	1.97	
ANNUAL RUNOFF (CFSM)	1.54	2.07	26.78	
ANNUAL RUNOFF (INCHES)	20.87	28.17	134	
10 PERCENT EXCEEDS	111	160	38	
50 PERCENT EXCEEDS	32	40	2.9	
90 PERCENT EXCEEDS	2.5	2.6		

e Estimated

STILLWATER RIVER NEAR STERLING, MA 01095220









MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	15.9	13.1	14.4
2	---	---	---	---	---	---	---	---	---	15.1	14.0	14.5
3	---	---	---	---	---	---	---	---	---	14.5	13.9	14.1
4	---	---	---	---	---	---	---	---	---	14.6	13.8	14.1
5	---	---	---	---	---	---	---	---	---	14.5	13.8	14.2
6	---	---	---	---	---	---	---	---	---	14.3	13.6	14.0
7	---	---	---	---	---	---	---	---	---	13.8	13.4	13.6
8	---	---	---	---	---	---	---	---	---	14.2	13.7	13.9
9	---	---	---	---	---	---	---	---	---	13.9	13.0	13.5
10	---	---	---	---	---	---	---	---	---	13.0	11.4	12.2
11	---	---	---	---	---	---	---	---	---	11.4	10.6	11.0
12	---	---	---	---	---	---	---	---	---	12.6	10.0	11.2
13	---	---	---	---	---	---	---	---	---	13.2	10.7	12.0
14	---	---	---	---	---	---	---	---	---	13.5	11.1	12.4
15	---	---	---	---	---	---	12.9	9.9	11.2	15.4	12.9	14.2
16	---	---	---	---	---	---	13.1	10.3	11.6	17.6	15.4	16.4
17	---	---	---	---	---	---	12.9	11.9	12.4	17.1	15.8	16.5
18	---	---	---	---	---	---	13.7	11.1	12.4	18.0	15.1	16.5
19	---	---	---	---	---	---	12.4	11.4	11.9	19.1	16.3	17.5
20	---	---	---	---	---	---	11.4	9.8	10.6	18.9	16.4	17.5
21	---	---	---	---	---	---	11.2	8.9	10.1	19.2	16.7	17.9
22	---	---	---	---	---	---	13.6	10.6	11.8	18.2	15.1	16.7
23	---	---	---	---	---	---	12.5	10.5	11.9	18.0	14.7	16.3
24	---	---	---	---	---	---	10.5	9.5	9.9	18.3	14.6	16.4
25	---	---	---	---	---	---	11.1	10.0	10.5	16.9	14.8	15.9
26	---	---	---	---	---	---	10.4	8.9	9.7	18.1	14.8	16.6
27	---	---	---	---	---	---	11.4	8.2	9.6	18.5	14.7	16.8
28	---	---	---	---	---	---	11.6	8.7	9.9	20.0	15.9	18.0
29	---	---	---	---	---	---	13.4	8.5	10.8	20.9	17.6	19.1
30	---	---	---	---	---	---	15.6	11.1	13.2	21.5	18.0	19.7
31	---	---	---	---	---	---	---	---	---	19.6	17.5	18.5
MONTH	---	---	---	---	---	---	---	---	---	21.5	10.0	15.3



## MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA

LOCATION.--Lat 42°22'22", long 71°49'43", Worcester County, Hydrologic Unit 01070004, on left bank, 300 ft upstream from bridge on Harris Street at Canada Mills, 2.1 mi north of Holden, MA, and about 3.5 mi upstream from mouth at Wachusett Reservoir.

DRAINAGE AREA.--44.4 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 to current year.

GAGE.--Water stage recorder. Elevation of gage is 560 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Quinapoxet Reservoir. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,670 ft<sup>3</sup>/s, Mar. 10, 1998, gage height, 13.76 ft; minimum, 2.2 ft<sup>3</sup>/s, Sept. 20, 1997.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 21, 1996, reached a discharge of 890 ft<sup>3</sup>/s, gage height, 12.45 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft<sup>3</sup>/s, Mar. 10, gage height, 13.76 ft; minimum daily, 2.5 ft<sup>3</sup>/s, Oct. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.9	17	31	e20	66	208	127	57	150	261	18	5.1
2	e2.5	49	23	17	61	229	177	95	92	188	13	5.1
3	e3.0	28	18	16	60	226	177	130	94	123	11	4.8
4	e3.5	16	17	21	60	191	153	140	70	93	10	4.3
5	e4.4	13	16	29	59	167	132	148	54	78	9.7	4.0
6	e5.6	11	15	39	55	146	110	180	44	62	6.0	4.0
7	5.7	8.9	14	57	51	130	85	194	38	55	4.6	3.6
8	4.2	8.0	13	118	48	121	77	159	41	54	3.9	3.6
9	3.5	20	12	92	45	542	96	137	43	58	8.5	3.8
10	5.2	30	13	75	43	1270	129	460	39	48	9.0	3.6
11	5.6	19	13	100	43	629	109	667	34	42	5.2	4.1
12	6.5	15	11	103	132	383	90	619	32	34	4.8	4.0
13	5.3	13	9.1	93	198	275	80	371	130	e30	8.2	3.8
14	3.3	14	8.4	101	126	239	72	263	516	e27	11	e4.0
15	e3.5	16	e8.0	82	87	210	67	208	481	e24	7.0	e4.6
16	e3.6	13	7.6	84	71	182	73	170	313	e22	6.5	5.6
17	e3.7	12	8.1	74	65	162	82	144	485	e21	9.4	4.9
18	e3.7	11	8.5	69	189	155	94	131	562	e25	12	4.5
19	e3.9	10	8.4	64	258	286	79	111	355	e50	9.5	4.4
20	e4.5	9.2	8.1	60	196	399	156	98	407	e18	7.8	3.9
21	5.5	9.0	7.3	56	170	289	145	91	255	e15	6.9	3.8
22	4.1	20	e8.0	56	146	244	110	81	183	e13	6.4	8.5
23	3.6	21	10	69	126	200	103	66	149	e14	6.0	11
24	3.6	17	e12	205	155	174	153	61	130	e12	7.8	6.9
25	5.7	14	15	237	263	163	138	53	111	e8.0	e6.4	6.0
26	7.1	14	18	162	218	165	108	54	95	e7.2	5.5	5.5
27	17	19	17	126	181	195	98	49	85	e16	5.0	5.2
28	13	15	15	97	164	201	81	42	72	16	6.2	5.4
29	7.9	13	e20	86	---	185	64	39	69	15	7.3	5.4
30	5.9	13	28	80	---	158	60	45	137	15	6.5	4.7
31	4.5	---	25	73	---	138	---	47	---	23	5.6	---
TOTAL	162.0	488.1	437.5	2561	3336	8262	3225	5110	5266	1467.2	244.7	148.1
MEAN	5.23	16.3	14.1	82.6	119	267	108	165	176	47.3	7.89	4.94
MAX	17	49	31	237	263	1270	177	667	562	261	18	11
MIN	2.5	8.0	7.3	16	43	121	60	39	32	7.2	3.9	3.6
CFSM	.12	.37	.32	1.86	2.68	6.00	2.42	3.71	3.95	1.07	.18	.11
IN.	.14	.41	.37	2.15	2.80	6.92	2.70	4.28	4.41	1.23	.21	.12

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

	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
MEAN	5.23	16.3	130	93.5	99.0	190	179	122	97.6	27.5	7.16	4.21
MAX	5.23	16.3	247	104	119	267	251	165	176	47.3	7.89	4.94
(WY)	1998	1998	1997	1997	1998	1998	1997	1998	1998	1998	1998	1998
MIN	5.23	16.3	14.1	82.6	78.9	113	108	78.9	19.8	7.58	6.42	3.48
(WY)	1998	1998	1998	1998	1997	1997	1998	1997	1997	1997	1997	1997

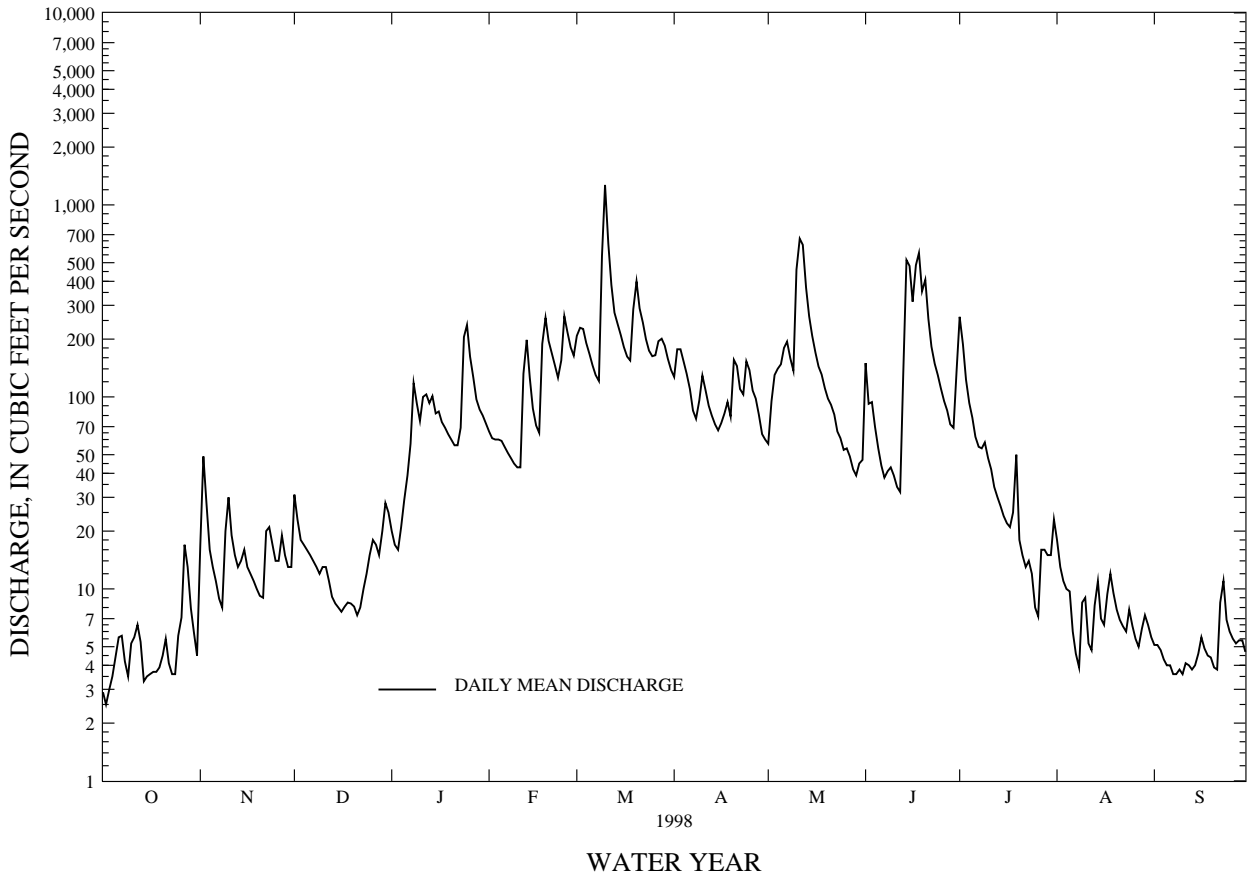
MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1997 - 1998	
ANNUAL TOTAL	21131.8		30707.6			
ANNUAL MEAN	57.9		84.1		84.1	
HIGHEST ANNUAL MEAN					84.1 1998	
LOWEST ANNUAL MEAN					84.1 1998	
HIGHEST DAILY MEAN	484	Apr 19	1270	Mar 10	1270	Mar 10 1998
LOWEST DAILY MEAN	2.4	Aug 3	2.5	Oct 2	2.4	Aug 3 1997
ANNUAL SEVEN-DAY MINIMUM	2.6	Jul 29	3.7	Oct 14	2.6	Jul 29 1997
INSTANTANEOUS PEAK FLOW			1670	Mar 10	1670	Mar 10 1998
INSTANTANEOUS PEAK STAGE			13.76	Mar 10	13.76	Mar 10 1998
INSTANTANEOUS LOW FLOW					2.2	Sep 20 1997
ANNUAL RUNOFF (CFSM)	1.30		1.89		1.89	
ANNUAL RUNOFF (INCHES)	17.71		25.73		25.75	
10 PERCENT EXCEEDS	148		199		210	
50 PERCENT EXCEEDS	18		41		54	
90 PERCENT EXCEEDS	3.5		4.7		4.1	

e Estimated

QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA 01095375



## MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA--Continued

## WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--April 1997 to current year.

INSTRUMENTATION.--Specific Conductance and Temperature water-quality monitor.

REMARKS.--Interruptions in the record are due to malfunctions of the instrument. Extremes for period of daily record and current year are for those values reported.

EXTREMES FOR PERIOD OF DAILY RECORD, APRIL 1997 TO CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 382  $\mu\text{S}/\text{cm}$ , Dec. 26, 1997; minimum, 61  $\mu\text{S}/\text{cm}$ , June 18, 1998.

WATER TEMPERATURE: Maximum recorded, 27.3°C, Sept. 13, 1998; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 382  $\mu\text{S}/\text{cm}$ , Dec. 26; minimum, 61  $\mu\text{S}/\text{cm}$ , June 18.

WATER TEMPERATURE: Maximum recorded, 27.3°C, Sept. 13; minimum, 0.0°C, several days during winter periods.

SPECIFIC CONDUCTANCE ( $\mu\text{S}/\text{CM}$  AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	130	120	123	156	155	155	261	245	253
2	---	---	---	147	127	137	157	153	155	245	226	236
3	---	---	---	---	---	---	155	150	152	251	228	238
4	---	---	---	---	---	---	151	147	149	261	187	245
5	---	---	---	---	---	---	148	144	146	262	227	239
6	---	---	---	---	---	---	147	144	146	239	205	224
7	222	161	188	---	---	---	147	143	144	208	166	191
8	214	149	185	---	---	---	144	141	143	210	155	165
9	189	146	156	---	---	---	143	128	140	170	127	160
10	222	150	181	---	---	---	142	137	139	176	154	167
11	224	193	210	---	---	---	140	136	138	154	78	125
12	224	204	218	---	---	---	211	117	175	119	99	106
13	223	152	198	153	148	151	209	196	204	129	105	119
14	189	151	169	155	150	153	209	161	198	116	99	107
15	---	---	---	155	151	153	209	176	195	118	99	108
16	---	---	---	158	132	156	217	109	202	114	106	109
17	---	---	---	160	144	158	219	159	211	123	111	117
18	---	---	---	164	160	162	220	198	210	125	119	122
19	---	---	---	168	164	166	227	213	222	132	122	128
20	---	---	---	172	168	170	227	219	223	133	128	130
21	235	131	193	174	172	173	223	203	212	133	122	128
22	217	133	171	175	173	174	225	198	210	126	114	119
23	228	126	166	177	175	176	218	197	206	115	101	108
24	156	121	135	176	173	174	201	181	188	191	105	155
25	210	121	174	176	140	173	342	191	239	172	133	153
26	218	177	209	173	165	169	382	193	308	136	114	127
27	209	135	174	168	164	166	377	267	300	129	111	119
28	187	116	133	167	161	164	270	231	257	126	117	121
29	193	115	166	163	159	161	240	214	233	129	118	124
30	199	117	164	161	156	158	354	210	262	129	115	123
31	131	115	120	---	---	---	367	251	302	130	120	127
MONTH	---	---	---	---	---	---	382	109	199	262	78	151



## MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	9.8	8.0	8.7	3.4	2.7	3.2	0.1	0.0	0.0			
2	---	---	---	11.0	9.6	10.2	2.7	2.2	2.5	.9	.0	.3			
3	---	---	---	---	---	---	2.9	2.1	2.5	1.9	.3	1.0			
4	---	---	---	---	---	---	3.7	2.7	3.1	2.2	1.2	1.6			
5	---	---	---	---	---	---	3.8	3.3	3.5	2.5	1.5	2.0			
6	---	---	---	---	---	---	3.5	2.6	2.9	3.1	2.1	2.5			
7	15.6	10.9	13.7	---	---	---	3.1	2.3	2.6	2.4	1.7	2.1			
8	14.6	10.0	11.9	---	---	---	3.0	2.2	2.5	1.7	1.2	1.4			
9	16.2	11.4	13.1	---	---	---	2.5	1.3	2.0	1.7	1.1	1.6			
10	17.2	13.5	15.0	---	---	---	2.8	1.8	2.2	2.2	1.3	1.6			
11	15.1	10.4	13.5	---	---	---	2.7	1.7	2.2	1.6	.5	1.0			
12	13.2	8.0	11.4	---	---	---	2.2	1.3	1.8	1.2	.3	.7			
13	13.9	10.3	11.9	4.9	4.0	4.5	2.2	.7	1.5	2.2	.5	1.4			
14	13.4	10.3	12.2	4.2	1.4	2.7	2.1	.0	1.0	1.0	.1	.5			
15	---	---	---	2.7	1.5	2.2	.8	.0	.3	.6	.0	.3			
16	---	---	---	3.0	2.1	2.6	1.5	.0	.7	.5	.0	.2			
17	---	---	---	3.2	1.5	2.6	2.5	.6	1.4	1.3	.3	.6			
18	---	---	---	3.5	2.3	2.9	2.0	.2	1.0	1.2	.5	.8			
19	---	---	---	3.0	1.9	2.5	2.8	.8	1.7	1.9	.7	1.2			
20	---	---	---	3.1	2.0	2.6	2.6	1.1	1.8	1.8	.9	1.3			
21	11.7	6.1	9.5	3.8	2.1	3.0	1.6	.2	.7	1.5	.3	.8			
22	10.4	5.4	7.6	3.7	3.3	3.5	.6	.0	.3	.4	.0	.1			
23	7.4	3.4	5.3	3.4	3.1	3.2	.7	.0	.3	.0	.0	.0			
24	8.4	3.8	6.1	3.7	2.9	3.3	.2	.0	.1	.7	.0	.3			
25	7.2	6.3	6.9	2.9	2.0	2.5	.7	.2	.5	1.2	.4	.7			
26	7.4	5.0	6.2	3.8	2.4	3.1	2.0	.5	1.1	1.4	.0	.6			
27	7.7	6.4	7.1	3.8	2.7	3.6	1.6	.8	1.1	.8	.0	.2			
28	7.6	6.1	7.0	3.2	2.5	2.8	1.4	.0	.7	1.1	.3	.7			
29	7.6	5.0	6.0	3.5	2.7	3.1	.7	.0	.3	2.3	.8	1.3			
30	9.4	4.3	6.4	3.3	2.2	2.8	.9	.1	.5	1.6	.7	1.2			
31	9.4	4.1	6.9	---	---	---	1.2	.0	.5	2.2	.8	1.6			
MONTH	---	---	---	---	---	---	3.8	.0	1.5	3.1	.0	1.0			
DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.9	0.0	0.8	3.7	3.3	3.5	12.5	9.2	10.7	15.7	11.9	13.9			
2	2.3	.0	1.1	4.6	3.1	3.7	9.7	9.1	9.3	14.9	12.8	13.8			
3	3.1	1.3	2.0	4.2	2.8	3.4	10.4	8.3	9.2	14.6	13.2	13.7			
4	2.3	1.4	1.9	4.9	2.8	3.7	8.6	7.4	8.2	15.1	13.3	14.1			
5	1.7	.8	1.2	4.3	3.1	3.7	7.9	6.6	7.2	15.4	13.7	14.4			
6	2.2	.2	1.0	4.5	2.7	3.6	8.4	6.4	7.3	15.2	14.4	14.7			
7	1.8	.0	.8	4.2	3.2	3.7	11.1	5.8	8.1	15.3	14.7	14.9			
8	2.4	.4	1.2	4.8	2.8	3.7	11.1	6.7	8.7	15.3	14.4	14.8			
9	2.2	.0	1.0	4.4	3.2	3.7	10.1	8.3	9.0	14.8	13.7	14.1			
10	2.8	.2	1.4	4.4	3.2	3.9	10.8	6.0	8.7	13.7	12.6	13.0			
11	3.9	1.1	2.4	3.7	2.1	2.8	11.4	6.8	8.9	12.6	11.3	11.9			
12	3.1	2.1	2.6	2.5	1.0	1.8	12.4	7.3	9.5	13.1	11.0	11.9			
13	2.9	1.5	2.1	3.0	.6	1.7	13.1	7.7	10.1	13.8	11.3	12.3			
14	2.4	.7	1.3	2.3	1.8	2.1	13.6	8.1	10.6	14.8	11.0	13.0			
15	1.9	.0	.7	3.4	1.8	2.4	12.6	8.8	10.5	16.9	12.7	14.8			
16	2.4	.1	1.1	3.5	1.6	2.5	13.6	9.5	11.5	18.4	15.2	16.7			
17	2.7	1.2	1.8	4.7	1.5	2.8	13.3	11.8	12.5	17.7	15.3	16.4			
18	1.9	1.2	1.6	3.9	2.4	3.1	13.7	10.3	12.0	18.8	14.8	16.8			
19	2.3	1.8	2.0	3.2	2.5	2.9	12.2	10.8	11.5	19.3	15.6	17.4			
20	3.3	1.8	2.4	2.9	2.5	2.7	11.4	10.2	10.8	19.7	15.8	17.7			
21	3.1	2.1	2.4	2.6	1.4	2.1	14.0	9.3	11.4	19.6	16.8	18.0			
22	3.8	1.7	2.4	1.6	.8	1.2	14.9	9.6	12.1	18.4	15.0	16.6			
23	2.8	1.6	2.2	3.2	.8	1.9	12.9	10.3	11.5	18.4	14.2	16.2			
24	2.3	1.1	1.9	4.7	1.3	2.6	12.2	9.9	10.8	18.7	14.3	16.4			
25	3.2	2.0	2.4	5.4	1.7	3.3	12.1	10.2	11.0	17.3	14.4	16.0			
26	3.9	2.0	2.7	6.2	2.8	4.3	10.9	8.8	9.9	18.8	15.0	16.9			
27	4.4	2.1	3.0	8.4	4.5	6.2	13.0	8.5	10.4	19.2	14.9	17.1			
28	4.6	2.4	3.4	10.1	6.2	8.0	12.2	8.3	10.1	20.3	15.9	18.2			
29	---	---	---	11.0	8.0	9.4	15.1	8.2	11.4	21.6	17.5	19.3			
30	---	---	---	12.7	8.1	10.3	16.6	10.9	13.4	21.4	17.6	19.5			
31	---	---	---	14.7	10.6	12.4	---	---	---	19.1	16.9	18.0			
MONTH	4.6	.0	1.8	14.7	.6	4.0	16.6	5.8	10.2	21.6	11.0	15.6			







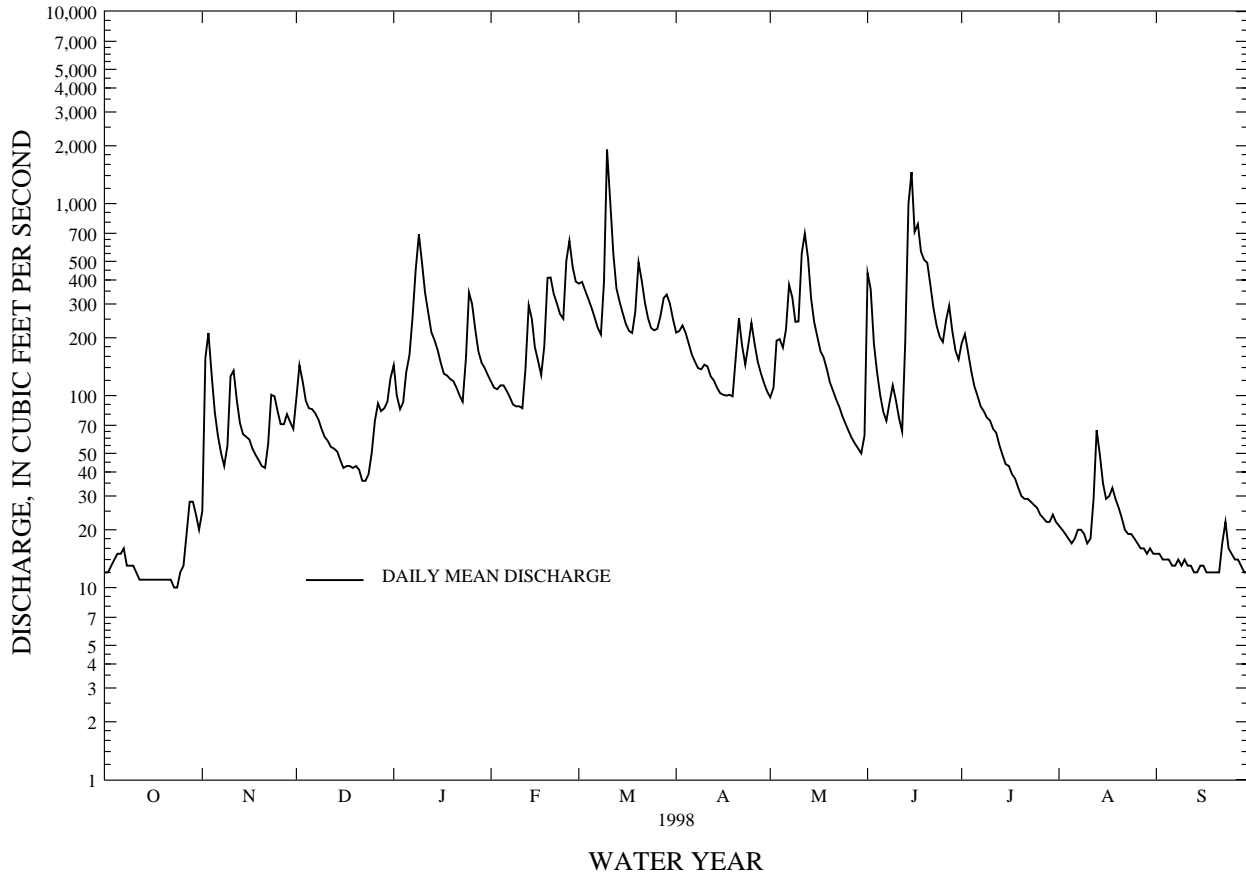
MERRIMACK RIVER BASIN

01096000 SQUANNACOOK RIVER NEAR WEST GROTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1950 - 1998	
ANNUAL TOTAL	40921		53165		114	
ANNUAL MEAN	112		146		174	
HIGHEST ANNUAL MEAN					1956	
LOWEST ANNUAL MEAN					35.9	
HIGHEST DAILY MEAN	951	Apr 20	1910	Mar 10	3420	Apr 6 1987
LOWEST DAILY MEAN	10	Sep 24	10	Oct 23	2.0	Sep 7 1965
ANNUAL SEVEN-DAY MINIMUM	11	Sep 22	11	Oct 18	4.3	Aug 28 1966
INSTANTANEOUS PEAK FLOW			2400	Mar 10	4220	Apr 6 1987
INSTANTANEOUS PEAK STAGE			6.93	Mar 10	8.16	Apr 6 1987
INSTANTANEOUS LOW FLOW			10	Oct 17		
ANNUAL RUNOFF (CFSM)	1.76		2.29		1.79	
ANNUAL RUNOFF (INCHES)	23.90		31.05		24.31	
10 PERCENT EXCEEDS	256		338		258	
50 PERCENT EXCEEDS	71		92		69	
90 PERCENT EXCEEDS	13		13		15	

e Estimated

SQUANNACOOK RIVER NEAR WEST GROTON, MA 01096000



## MERRIMACK RIVER BASIN

01096500 NASHUA RIVER AT EAST PEPPERELL, MA

LOCATION.--Lat 42°40'03", long 71°34'32", Middlesex County, Hydrologic Unit 01070004, on right bank 200 ft downstream from powerplant of James River-Pepperell Co. at East Pepperell and 0.8 mi upstream from Nissitissit River.

DRAINAGE AREA.--Total above gage, 435 mi<sup>2</sup>, net above gage, 316 mi<sup>2</sup>, excludes 119 mi<sup>2</sup> for use of Boston metropolitan district and city of Worcester.

PERIOD OF RECORD.--Discharge: October 1935 to current year.  
Water-quality records: Water years 1952-53, 1973-74.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 169.04 ft above sea level.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Extremes and daily discharge include water released while diverting flow of Nashua River for use of Boston metropolitan district and water diverted into basin from Ware River Basin since 1955 for municipal use of Fitchburg. Prior to October 1981, water diverted around station through plant of James River-Pepperell Co. was added to daily figures. Flow regulated by powerplant immediately upstream. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--63 years, 587 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,900 ft<sup>3</sup>/s, Mar. 20, 1936, gage height, 19.1 ft, from floodmarks, from rating curve extended above 12,000 ft<sup>3</sup>/s on basis of velocity-area studies; minimum daily, 1.1 ft<sup>3</sup>/s, Aug. 13, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,270 ft<sup>3</sup>/s, Mar. 12, gage height, 9.76 ft; minimum daily, 29 ft<sup>3</sup>/s, Sept. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	245	481	515	788	1680	1230	641	1120	1110	157	95
2	132	458	645	671	663	1650	1220	595	1780	1290	286	108
3	157	890	618	500	669	1560	1260	760	1430	1140	231	117
4	104	778	692	405	689	1440	1210	988	1010	909	192	118
5	66	586	456	416	654	1330	1100	972	772	799	118	118
6	120	442	382	743	658	1220	1010	1060	492	642	82	117
7	103	417	405	976	638	1130	928	1360	518	534	104	115
8	136	410	415	1580	627	1050	855	1440	691	519	296	162
9	69	529	401	2250	620	1510	822	1220	565	512	189	223
10	233	387	403	2460	610	3520	835	1200	623	502	112	425
11	139	664	391	1930	563	4900	868	1880	681	467	79	68
12	63	699	336	1450	519	4970	825	2610	532	355	136	66
13	157	460	251	1190	1250	3940	807	2850	607	437	241	66
14	94	396	246	1060	1350	e3100	793	2530	2470	399	271	58
15	60	397	268	946	1050	e2500	632	2020	3850	263	218	46
16	63	392	261	853	859	e1900	441	1630	3950	263	184	47
17	66	155	256	834	792	1550	570	1380	3320	280	240	29
18	71	145	256	800	915	1350	651	1220	2890	261	252	57
19	74	487	253	775	1730	1420	606	1090	2330	250	226	145
20	81	692	249	619	1980	1900	639	926	2000	247	140	67
21	171	242	250	651	1780	2190	1020	833	1730	243	174	134
22	231	55	246	664	1530	2030	969	693	1680	187	212	166
23	215	280	245	650	1340	1710	843	570	1450	173	124	272
24	215	604	253	794	1290	1480	892	571	1190	186	190	296
25	213	469	253	1500	1910	1340	1110	510	1210	191	73	164
26	107	427	118	1660	2450	1260	1020	431	1380	216	90	42
27	66	413	317	1300	2290	1220	882	415	1340	223	121	43
28	179	347	425	1060	1880	1240	821	394	1150	214	211	94
29	237	312	414	933	---	1260	711	376	973	193	151	108
30	244	445	414	868	---	1230	651	334	892	130	91	106
31	236	---	502	813	---	1270	---	332	---	91	94	---
TOTAL	4231	13223	11102	31866	32094	59850	26221	33831	44626	13226	5285	3672
MEAN	136	441	358	1028	1146	1931	874	1091	1488	427	170	122
MAX	244	890	692	2460	2450	4970	1260	2850	3950	1290	296	425
MIN	60	55	118	405	519	1050	441	332	492	91	73	29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1998, BY WATER YEAR (WY)

	36	37	38	39	40	41	42	43	44	45	46	47	48
MEAN	318	488	608	622	681	1143	1263	734	492	255	215	232	
MAX	1356	1781	1616	1417	1544	3930	3676	1382	1976	1366	966	1671	
(WY)	1956	1956	1997	1979	1970	1936	1987	1953	1982	1938	1938	1938	
MIN	91.1	108	134	116	186	386	369	236	154	90.0	71.3	76.4	
(WY)	1942	1965	1966	1981	1980	1989	1985	1965	1941	1966	1966	1995	

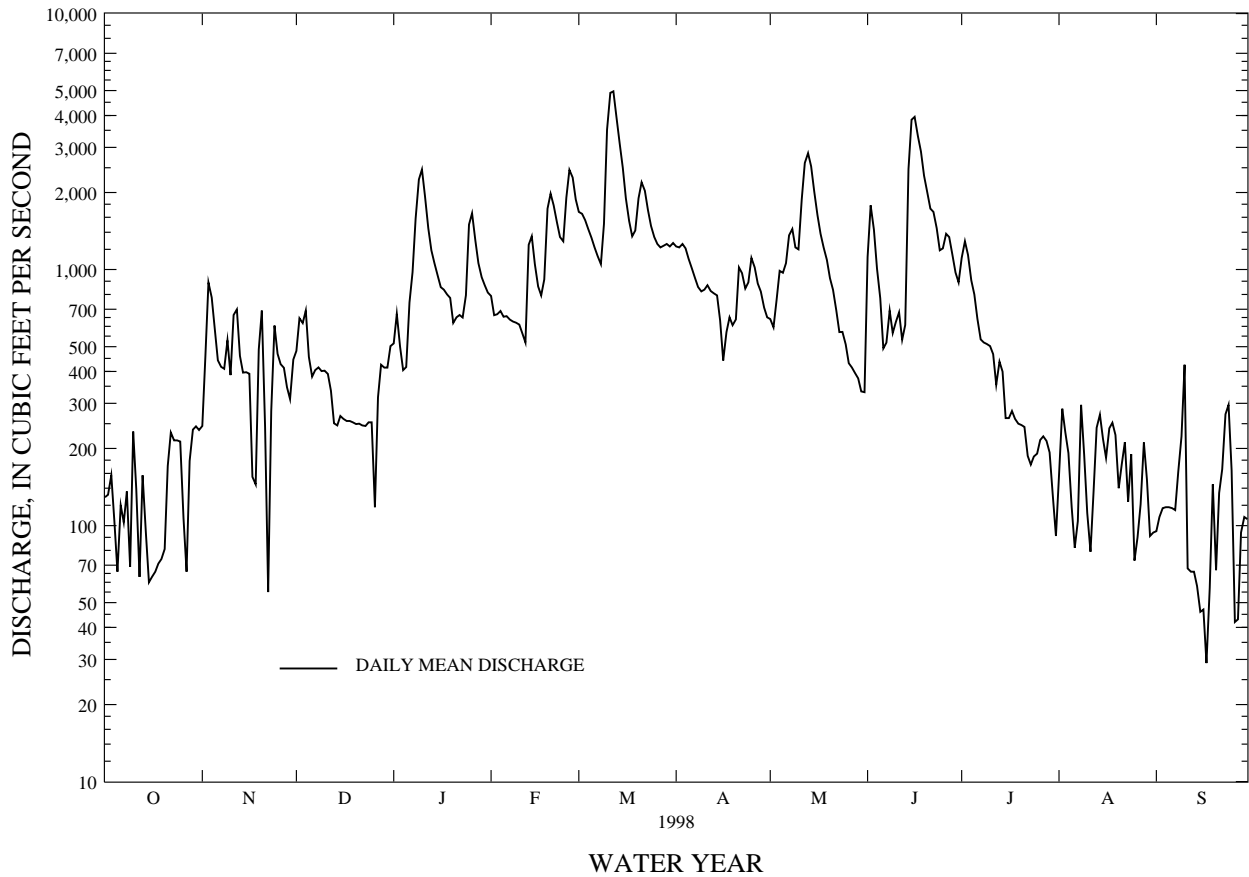
MERRIMACK RIVER BASIN

01096500 NASHUA RIVER AT EAST PEPPERELL, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1936 - 1998	
ANNUAL TOTAL	216833		279227			
ANNUAL MEAN	594		765		587	
HIGHEST ANNUAL MEAN					969 1956	
LOWEST ANNUAL MEAN					214 1965	
HIGHEST DAILY MEAN	3460	Apr 21	4970	Mar 12	19400	Mar 20 1936
LOWEST DAILY MEAN	21	Aug 7	29	Sep 17	1.1	Aug 13 1939
ANNUAL SEVEN-DAY MINIMUM	73	Oct 14	53	Sep 12	14	Aug 1 1965
INSTANTANEOUS PEAK FLOW			5270	Mar 12	20900	Mar 20 1936
INSTANTANEOUS PEAK STAGE			9.76	Mar 12	19.10	Mar 20 1936
INSTANTANEOUS LOW FLOW			13	Sep 17		
10 PERCENT EXCEEDS	1360		1680		1270	
50 PERCENT EXCEEDS	406		532		370	
90 PERCENT EXCEEDS	94		107		98	

e Estimated

NASHUA RIVER AT EAST PEPPERELL, MA 01096500



## MERRIMACK RIVER BASIN

01097000 ASSABET RIVER AT MAYNARD, MA

LOCATION.--Lat 42°25'55", long 71°27'01", Middlesex County, Hydrologic Unit 01070005, on right bank at Maynard, 150 ft upstream from bridge on State Highway 27, 1.7 mi downstream from Assabet Brook, and 7.1 mi upstream from confluence with Sudbury River.

DRAINAGE AREA.--116 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: July 1941 to current year.  
Water-quality records: Water years 1954, 1967-74.

REVISED RECORDS.--WSP 1231: 1945-46.

GAGE.--Water-stage recorder. Datum of gage is 142.12 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional diurnal fluctuation at low flow by mills upstream; greater regulation prior to 1969. Since 1962, high flow affected by retarding reservoirs and, since 1970, occasional release at low flow by these reservoirs.

AVERAGE DISCHARGE.--57 years, 191 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft<sup>3</sup>/s, Aug. 20, 1955, gage height, 8.94 ft; maximum gage height, 8.96 ft, Aug. 20, 1955 (backwater from debris); minimum daily, 0.20 ft<sup>3</sup>/s, Feb. 7, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1886, that of Aug. 20, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,550 ft<sup>3</sup>/s, Mar. 11, gage height, 5.61 ft; minimum daily, 21 ft<sup>3</sup>/s, Sept. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	62	136	187	291	571	305	191	234	480	119	40
2	23	162	174	154	267	533	347	222	270	574	103	44
3	26	184	152	133	252	494	395	273	246	511	82	48
4	33	144	122	137	247	446	388	331	220	400	69	38
5	38	102	109	177	248	393	352	334	e180	318	62	24
6	36	79	103	215	239	352	316	364	e155	263	57	24
7	31	68	94	264	220	320	283	479	e145	225	63	24
8	26	66	86	426	204	288	259	526	e185	200	64	23
9	25	94	80	557	193	452	265	482	e160	189	57	22
10	25	147	76	599	185	1160	299	583	e145	175	51	21
11	26	149	73	532	183	1500	318	932	e115	158	60	21
12	30	108	72	453	284	1300	294	1140	102	138	117	21
13	30	84	70	386	438	1010	257	1040	282	119	78	21
14	32	83	65	322	487	781	230	856	1080	102	66	21
15	32	86	59	275	410	665	205	690	1450	96	61	22
16	33	83	57	241	335	585	197	569	1290	89	53	23
17	65	77	55	225	285	530	202	494	1020	82	50	24
18	40	71	54	219	427	488	231	426	935	76	54	24
19	33	68	54	208	681	545	228	372	899	70	53	24
20	36	64	54	199	742	738	264	328	802	66	50	23
21	34	68	54	189	644	791	308	280	673	66	46	24
22	33	96	51	177	556	715	302	240	555	62	44	38
23	30	143	58	171	491	624	259	211	479	113	43	91
24	30	143	62	358	510	570	330	184	423	317	44	71
25	35	118	73	589	709	535	377	164	377	222	43	54
26	41	98	90	644	823	507	348	152	379	149	43	44
27	71	89	99	559	750	477	294	147	338	108	43	38
28	83	88	98	476	633	451	256	141	292	87	42	34
29	64	85	89	406	---	409	228	127	264	83	42	34
30	51	82	164	357	---	371	205	121	307	90	41	32
31	47	---	222	321	---	334	---	126	---	100	41	---
TOTAL	1163	2991	2805	10156	11734	18935	8542	12525	14002	5728	1841	992
MEAN	37.5	99.7	90.5	328	419	611	285	404	467	185	59.4	33.1
MAX	83	184	222	644	823	1500	395	1140	1450	574	119	91
MIN	23	62	51	133	183	288	197	121	102	62	41	21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

MEAN	91.7	152	197	222	249	405	386	239	153	73.8	61.7	63.3
MAX	375	542	547	670	696	776	1053	443	788	254	561	542
(WY)	1956	1956	1997	1979	1970	1983	1987	1954	1982	1959	1955	1954
MIN	9.92	22.1	35.6	37.6	72.5	143	127	114	39.0	11.6	5.18	5.00
(WY)	1958	1950	1950	1966	1965	1989	1966	1986	1949	1966	1966	1957

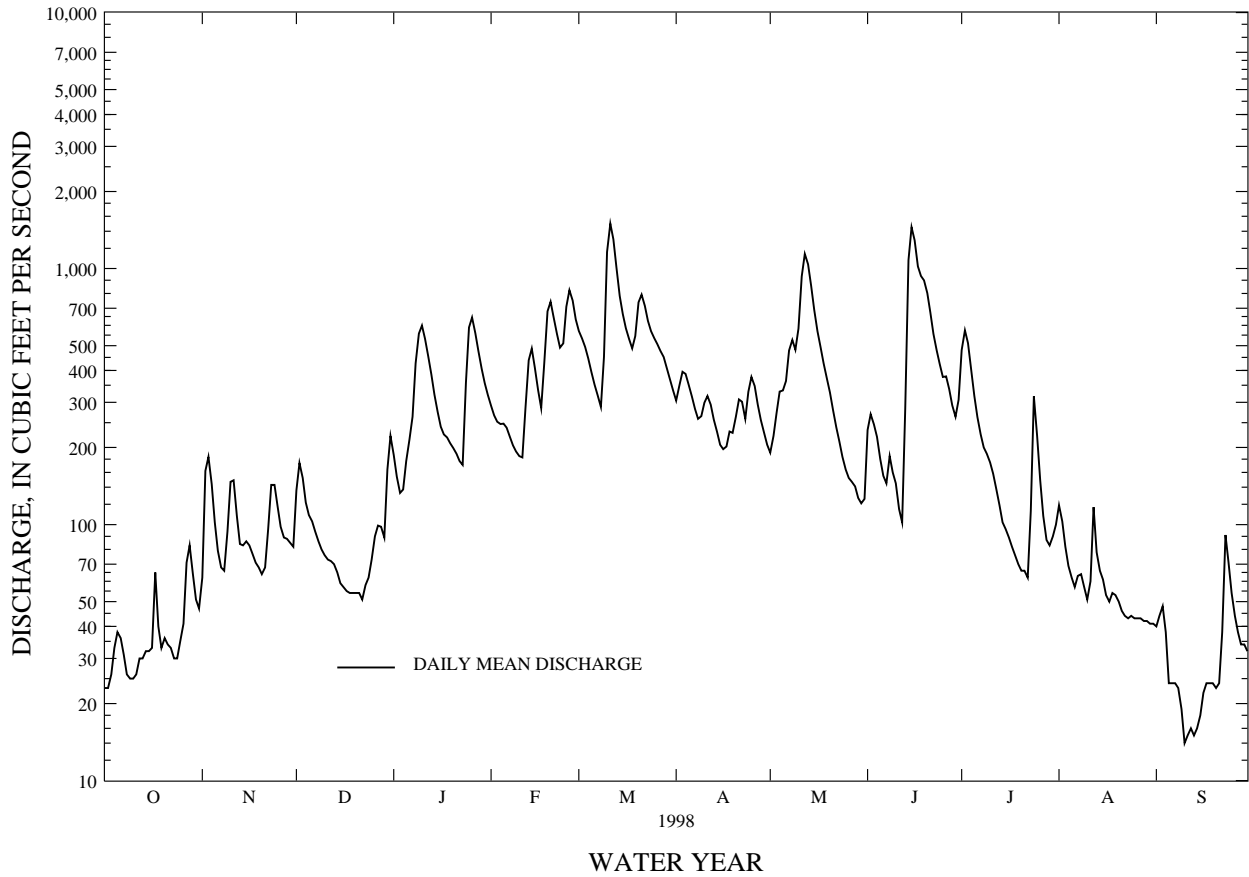
MERRIMACK RIVER BASIN

01097000 ASSABET RIVER AT MAYNARD, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1941 - 1998	
ANNUAL TOTAL	64056		91414		191	
ANNUAL MEAN	175		250		296	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					73.3	
HIGHEST DAILY MEAN	1140		1500		3650	
LOWEST DAILY MEAN	20	Apr 20	21	Mar 11	.20	Aug 20 1955
ANNUAL SEVEN-DAY MINIMUM	22	Aug 20	21	Sep 10	1.0	Feb 7 1965
INSTANTANEOUS PEAK FLOW			1550		4250	
INSTANTANEOUS PEAK STAGE			5.61		8.96	
INSTANTANEOUS LOW FLOW			21		25	
10 PERCENT EXCEEDS	394		572		425	
50 PERCENT EXCEEDS	94		162		128	
90 PERCENT EXCEEDS	25		34		25	

e Estimated

ASSABET RIVER AT MAYNARD, MA 01097000





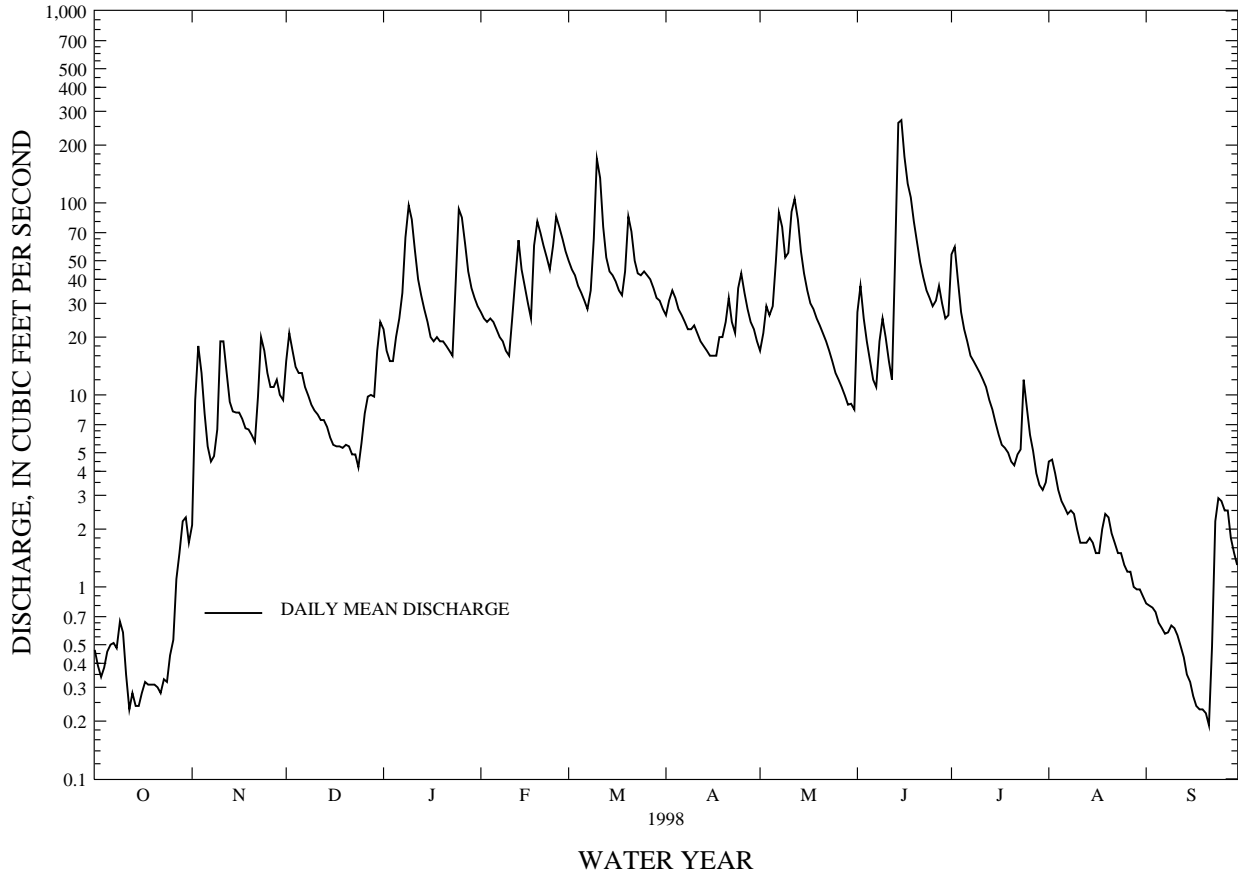
MERRIMACK RIVER BASIN

01097300 NASHOBA BROOK NEAR ACTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1963 - 1998	
ANNUAL TOTAL	5497.79		8581.78		20.8	
ANNUAL MEAN	15.1		23.5		36.1	
HIGHEST ANNUAL MEAN					7.09	
LOWEST ANNUAL MEAN					1978	
HIGHEST DAILY MEAN	135	Apr 20	270	Jun 15	560	Jan 26 1979
LOWEST DAILY MEAN	.23	Oct 12	.19	Sep 21	.01	Sep 8 1995
ANNUAL SEVEN-DAY MINIMUM	.27	Oct 12	.24	Sep 15	.02	Sep 3 1995
INSTANTANEOUS PEAK FLOW			293	Jun 14	679	Jan 26 1979
INSTANTANEOUS PEAK STAGE			6.89	Jun 14	6.89	Jun 14 1998
INSTANTANEOUS LOW FLOW			.18	Sep 21	.01	Sep 4 1995
10 PERCENT EXCEEDS	34		56		50	
50 PERCENT EXCEEDS	9.0		15		12	
90 PERCENT EXCEEDS	.50		.57		1.3	

e Estimated

NASHOBA BROOK NEAR ACTON, MA 01097300





## MERRIMACK RIVER BASIN

01098530 SUDBURY RIVER AT SAXONVILLE, MA

LOCATION.--Lat 42°19'31", long 71°23'53", Middlesex County, Hydrologic Unit 01070005, on left bank at downstream side of new Danforth Street Bridge, at Saxonville, 600 ft east of Elm Street, 700 ft downstream from confluence with Lake Cochituate Outlet, and 0.7 mi downstream from Saxonville Dam.

DRAINAGE AREA.--106 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1979 to current year.

Water-quality records: Water years 1994-95.

GAGE.--Water-stage recorder. Datum of gage is 110.55 ft above sea level (Massachusetts Department of Public Works benchmark).

REMARKS.--Records good except those above 500 ft<sup>3</sup>/s, which are fair. Flow regulated by reservoirs upstream and affected by diversions and spill. Flow diverted as needed for use of Boston metropolitan district. Part of flow from Wachusett Reservoir on Nashua River is diverted into Sudbury Reservoir en route to Boston metropolitan district.

AVERAGE DISCHARGE.--18 years (water years 1981-98), 201 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft<sup>3</sup>/s, June 7, 1982, gage height, 13.30 ft; maximum gage height, 13.47 ft, Apr. 8, 1987; minimum daily, 6.0 ft<sup>3</sup>/s, June 26, 1993, Aug. 3, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft<sup>3</sup>/s, June 14, gage height, 10.77 ft; minimum daily, 5.6 ft<sup>3</sup>/s, Oct. 20, 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	47	130	210	364	629	308	201	182	573	65	32
2	7.5	118	138	202	349	599	377	262	133	554	55	28
3	10	74	118	196	340	560	351	248	175	495	50	26
4	8.9	43	113	206	337	521	330	250	139	406	46	23
5	14	30	132	225	338	507	313	311	119	332	44	19
6	9.6	22	201	234	326	488	296	431	107	268	43	14
7	7.8	18	195	283	300	469	271	542	101	218	42	16
8	7.0	24	166	416	285	458	253	534	137	234	36	16
9	7.0	75	87	459	274	696	264	505	137	202	33	12
10	6.7	96	78	465	252	945	286	757	114	177	32	11
11	6.1	159	72	430	222	863	198	876	101	146	31	9.9
12	5.8	149	48	385	348	784	180	931	94	114	30	9.6
13	6.0	146	40	354	378	661	172	874	468	111	29	9.5
14	6.0	127	40	329	357	627	238	792	958	109	19	9.4
15	6.1	85	37	299	321	587	259	702	943	87	16	12
16	5.8	85	34	313	291	546	241	600	996	81	14	14
17	5.8	78	33	289	272	511	238	545	934	76	42	11
18	5.8	77	32	272	492	483	207	506	880	72	40	9.9
19	5.8	76	31	262	586	600	186	446	870	62	28	9.9
20	5.6	74	31	252	634	669	285	426	809	54	20	12
21	5.6	73	30	243	587	628	251	398	744	43	18	11
22	6.0	158	28	233	540	611	227	335	657	36	16	82
23	6.9	153	49	237	505	568	243	268	580	47	15	61
24	7.0	140	63	556	633	536	341	234	537	54	30	24
25	20	138	69	547	757	511	296	195	503	43	26	20
26	11	123	82	484	718	485	269	168	529	36	41	23
27	40	80	76	448	670	463	253	131	452	32	72	18
28	17	61	74	418	624	445	229	108	420	28	54	21
29	13	57	66	390	---	425	211	103	357	43	48	14
30	9.7	55	206	371	---	384	199	102	351	45	44	13
31	9.9	---	240	376	---	319	---	97	---	68	36	---
TOTAL	292.3	2641	2739	10384	12100	17578	7772	12878	13527	4846	1115	591.2
MEAN	9.43	88.0	88.4	335	432	567	259	415	451	156	36.0	19.7
MAX	40	159	240	556	757	945	377	931	996	573	72	82
MIN	5.6	18	28	196	222	319	172	97	94	28	14	9.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1998, BY WATER YEAR (WY)

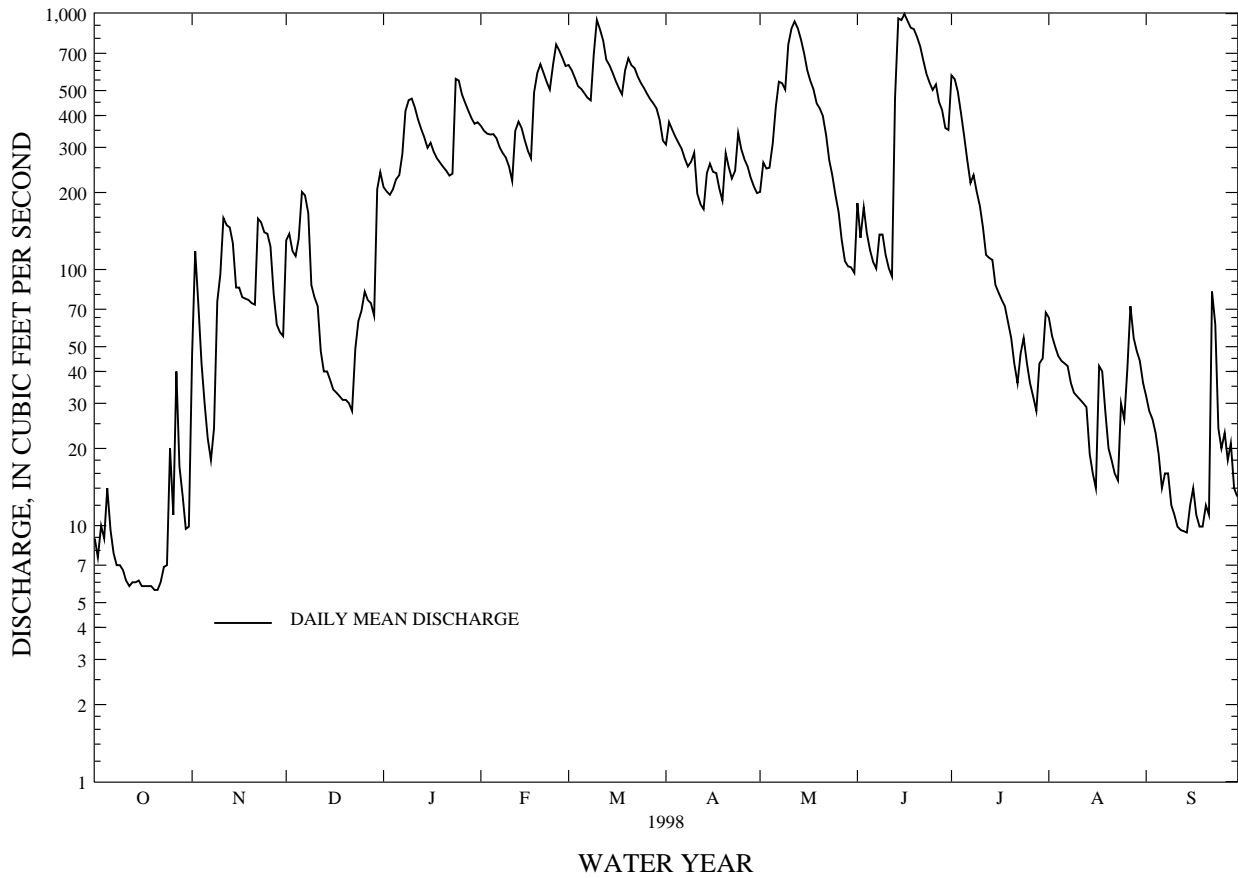
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	116	180	257	230	265	342	377	222	176	74.6	84.0	63.6							
MAX	376	385	572	471	480	757	920	415	739	156	192	147							
(WY)	1997	1990	1997	1982	1990	1983	1987	1998	1982	1998	1989	1989							
MIN	9.43	72.2	88.4	59.5	67.6	121	98.7	75.2	31.3	10.9	16.3	11.0							
(WY)	1998	1985	1998	1981	1980	1985	1985	1986	1993	1993	1997	1997							

MERRIMACK RIVER BASIN

01098530 SUDBURY RIVER AT SAXONVILLE, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1980 - 1998	
ANNUAL TOTAL	57801.7		86463.5		201	
ANNUAL MEAN	158		237		253	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					96.6	
HIGHEST DAILY MEAN	705	Apr 20	996	Jun 16	2250	Jun 7 1982
LOWEST DAILY MEAN	5.6	Oct 20	5.6	Oct 20	5.6	Oct 20 1997
ANNUAL SEVEN-DAY MINIMUM	5.8	Oct 16	5.8	Oct 16	5.8	Oct 16 1997
INSTANTANEOUS PEAK FLOW			1040	Jun 14	2420	Jun 7 1982
INSTANTANEOUS PEAK STAGE			10.77	Jun 14	13.47	Apr 8 1987
INSTANTANEOUS LOW FLOW			5.3	Oct 21		
10 PERCENT EXCEEDS	421		586		440	
50 PERCENT EXCEEDS	91		158		140	
90 PERCENT EXCEEDS	7.7		12		31	

SUDBURY RIVER AT SAXONVILLE, MA 01098530



## MERRIMACK RIVER BASIN

01099500 CONCORD RIVER BELOW RIVER MEADOW BROOK AT LOWELL, MA

LOCATION.--Lat 42°38'12", long 71°18'09", Middlesex County, Hydrologic Unit 01070005, on right bank 300 ft downstream from Rogers Street Bridge at Lowell, 0.3 mi downstream from River Meadow Brook, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--Total above gage, 400 mi<sup>2</sup>; net above gage, 307 mi<sup>2</sup> - diversion as needed from 92.6 mi<sup>2</sup> for use by Boston metropolitan district.

PERIOD OF RECORD.--Discharge: October 1936 to current year. October, November 1936 monthly discharge only, published in WSP 1301.

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

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 67.41 ft above sea level.

REMARKS.--Records good. Low flow regulated by mills upstream. Daily discharge includes undiverted water from 92.6 mi<sup>2</sup> in basins of Sudbury River and Lake Cochituate. Prior to December 1961, diversion upstream for use of city of Lowell. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--62 years, 653 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,410 ft<sup>3</sup>/s, Jan. 28, 1979, gage height, 9.60 ft; maximum gage height of 9.60 ft also occurred Apr. 10, 1987; minimum daily, 4.0 ft<sup>3</sup>/s, Sept. 29, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,060 ft<sup>3</sup>/s, June 18; gage height, 7.96 ft; minimum daily, 60 ft<sup>3</sup>/s, Oct. 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	147	403	561	1310	2210	1470	898	781	1600	317	147
2	62	328	454	587	1250	2140	1450	914	722	1610	321	138
3	64	358	499	592	1190	2040	1410	891	758	1660	303	133
4	65	367	492	607	1140	1960	1370	899	758	1650	273	131
5	77	370	475	632	1080	1850	1330	952	690	1550	247	116
6	79	344	456	681	1060	1740	1290	1200	634	1450	210	106
7	79	328	446	756	1020	1630	1230	1360	591	1340	219	95
8	76	248	416	1010	980	1530	1170	1470	619	1200	213	89
9	71	317	424	1160	935	1700	1110	1520	621	1090	201	86
10	68	396	372	1280	895	2070	1060	1680	600	992	187	81
11	62	406	355	1360	867	2230	1050	1890	570	907	172	76
12	60	438	300	1380	984	2500	1020	2180	520	826	225	74
13	62	417	298	1350	1080	2600	989	2360	935	754	263	69
14	61	390	270	1300	1130	2570	940	2490	2020	678	250	67
15	64	392	224	1210	1180	2460	886	2480	2380	605	226	68
16	60	373	223	1110	1160	2310	847	2360	2730	540	193	70
17	61	335	222	1070	1120	2150	830	2220	3000	499	189	72
18	69	320	205	1030	1310	2040	822	2060	3040	400	214	72
19	71	283	191	978	1500	2060	810	1890	3020	383	213	71
20	70	281	192	931	1620	2150	873	1750	2980	297	202	68
21	64	280	187	885	1740	2130	880	1600	2880	293	182	68
22	77	307	183	835	1780	2200	899	1430	2730	245	162	142
23	63	410	182	781	1750	2210	900	1310	2560	257	150	165
24	65	453	190	1080	1810	2160	990	1190	2360	410	152	201
25	67	467	227	1260	2100	2100	1020	1080	2160	492	158	187
26	76	451	271	1350	2170	2030	1060	976	2070	485	160	163
27	137	432	309	1450	2240	1950	1050	891	1910	406	161	152
28	144	411	308	1510	2250	1870	1020	812	1770	373	167	133
29	151	358	307	1500	---	1780	996	745	1650	305	164	118
30	120	367	454	1450	---	1680	947	683	1580	309	163	109
31	166	---	537	1380	---	1590	---	637	---	282	156	---
TOTAL	2478	10774	10072	33066	38651	63640	31719	44818	49639	23888	6413	3267
MEAN	79.9	359	325	1067	1380	2053	1057	1446	1655	771	207	109
MAX	166	467	537	1510	2250	2600	1470	2490	3040	1660	321	201
MIN	60	147	182	561	867	1530	810	637	520	245	150	67

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1998, BY WATER YEAR (WY)

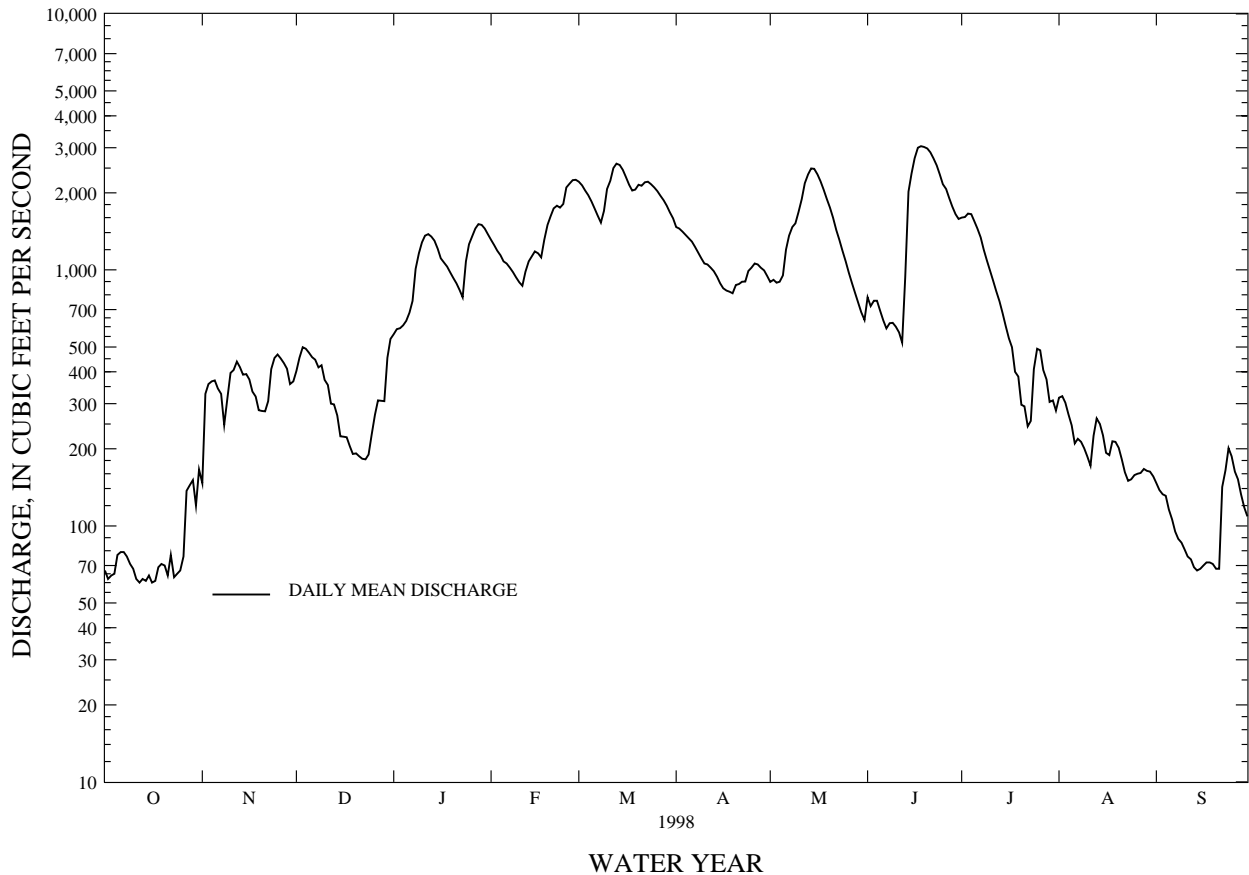
	326	534	719	741	868	1267	1310	820	525	269	236	233
MEAN	326	534	719	741	868	1267	1310	820	525	269	236	233
MAX	1320	1866	1853	1996	1856	2510	3149	1599	2502	1512	1403	1694
(WY)	1997	1956	1997	1979	1970	1983	1987	1954	1982	1938	1955	1954
MIN	38.3	86.9	133	150	230	479	377	283	116	50.0	33.1	25.4
(WY)	1942	1966	1966	1981	1980	1989	1966	1941	1964	1949	1966	1957

MERRIMACK RIVER BASIN

01099500 CONCORD RIVER BELOW RIVER MEADOW BROOK AT LOWELL, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1937 - 1998	
ANNUAL TOTAL	226752		318425		653	
ANNUAL MEAN	621		872		1112	
HIGHEST ANNUAL MEAN					242	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	2540	Apr 22	3040	Jun 18	5340	Jan 28 1979
LOWEST DAILY MEAN	44	Aug 2	60	Oct 12	4.0	Sep 29 1957
ANNUAL SEVEN-DAY MINIMUM	45	Aug 2	61	Oct 11	16	Sep 26 1957
INSTANTANEOUS PEAK FLOW			3060	Jun 18	5410	Jan 28 1979
INSTANTANEOUS PEAK STAGE			7.96	Jun 18	9.60	Jan 28 1979
10 PERCENT EXCEEDS	1460		2080		1400	
50 PERCENT EXCEEDS	373		637		491	
90 PERCENT EXCEEDS	64		79		100	

CONCORD RIVER BL RIVER MEADOW BR, AT LOWELL, MA 01099500



## MERRIMACK RIVER BASIN

01100000 MERRIMACK RIVER BELOW CONCORD RIVER AT LOWELL, MA

LOCATION.--Lat 42°38'45", long 71°17'56", Middlesex County, Hydrologic Unit 01070002, on right bank at Lowell, 1,100 ft downstream from Concord River.

DRAINAGE AREA.--Total above gage, 4,635 mi<sup>2</sup>; net above gage, 4,425 mi<sup>2</sup>—excludes 210 mi<sup>2</sup> for use of Boston metropolitan district and city of Worcester.

PERIOD OF RECORD.--Discharge: June 1923 to current year.  
Water-quality records: Water years 1954, 1966-74.

GAGE.--Water-stage recorder. Datum of gage is 5.18 ft above sea level. Prior to Mar. 7, 1934, at Boott Mills, 1,800 ft upstream and 700 ft above mouth of Concord River, in same gage pool and at same datum; gage-height record (provided by Proprietors of the Locks and Canals on Merrimack River) was indicative of flow including that of Concord River.

REMARKS.--Records excellent. Daily discharge includes water released from 210 mi<sup>2</sup> in basins of Sudbury and Nashua Rivers and Lake Cochituate. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnepesaukee, Winnisquam, and other lakes and reservoirs upstream. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--75 years, 7,727 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 173,000 ft<sup>3</sup>/s, Mar. 20, 1936, gage height, 68.4 ft, from floodmarks; minimum daily, 199 ft<sup>3</sup>/s, Sept. 23, 1923.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1735, that of Mar. 20, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50,400 ft<sup>3</sup>/s, June 18; gage height, 52.74 ft; minimum daily, 1,140 ft<sup>3</sup>/s, Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	2130	7000	4710	7880	19900	32200	7810	7070	22000	2650	1560
2	1520	5990	6940	4700	7280	19100	30900	7950	8120	21800	2490	1340
3	1630	7480	6970	4830	7180	18700	32300	8320	7850	22000	2300	1250
4	2090	12200	6550	4760	6980	18700	31800	9400	6720	19100	2170	1830
5	1950	11600	6420	4890	6940	18600	30000	10100	5590	16000	2240	1450
6	1760	8960	6210	5810	6840	17700	27000	11500	4830	14500	1870	1410
7	2330	7930	5700	7900	6530	16300	22900	16800	4230	13400	2130	1390
8	2120	7060	5220	11000	7650	15100	19800	23000	4710	12000	2030	1920
9	1730	6330	5060	18500	6170	16500	17400	21100	5260	11400	2060	1900
10	1870	7190	4800	25400	5990	31800	15000	18200	4820	10400	2020	2680
11	1490	8340	4850	24000	4700	40200	13100	17600	5070	9870	2590	2620
12	1650	9390	4050	19800	6470	39800	12400	19100	4450	9040	2250	2040
13	1990	8420	3580	16100	9530	33000	11500	19300	8140	8280	3030	2010
14	1880	7410	3950	13500	11300	26700	10900	18100	21500	7820	3570	1350
15	1440	6660	3260	11500	9990	22200	9930	15900	39400	5550	2930	1280
16	2080	6420	3140	8770	9980	19400	8550	13800	42700	5160	2490	1380
17	2210	5800	3380	9350	8930	17700	8650	11900	47100	6220	2250	1620
18	2020	5370	3690	9690	9710	16300	9120	11900	47700	5000	2580	3070
19	2330	5030	3170	9090	12200	16100	9710	8790	41800	3910	2390	2750
20	2110	5800	3410	8880	14000	17800	10200	8960	39600	3970	2020	2480
21	1850	5190	2980	7990	14400	18300	11800	8150	37100	4270	1850	1840
22	1820	5320	2650	6880	13800	17300	14000	7030	34300	3900	1600	2020
23	1920	5730	2630	7050	12900	15800	12600	6510	31000	4330	1780	2200
24	1890	6200	3200	8300	12400	14700	11800	5930	26600	4580	1800	2070
25	1900	5920	3570	9780	16300	14300	11800	5650	22600	4880	1710	1730
26	1720	5280	4030	10400	22200	13400	11300	7310	20700	4580	1820	1340
27	2140	6050	3970	10300	22900	13400	10700	3960	21200	3800	3060	1180
28	1800	5740	4100	9290	21100	14700	9240	3030	24400	3650	3120	1170
29	2050	5990	3820	8940	---	20800	8930	3130	28300	3400	2260	1190
30	1900	5890	4910	8530	---	27900	8290	3890	25200	3180	2010	1140
31	1780	---	4900	8200	---	32200	---	3900	---	2630	1690	---
TOTAL	58280	202820	138110	318840	302250	644400	473820	338020	628060	270620	70760	53210
MEAN	1880	6761	4455	10290	10790	20790	15790	10900	20940	8730	2283	1774
MAX	2330	12200	7000	25400	22900	40200	32300	23000	47700	22000	3570	3070
MIN	1310	2130	2630	4700	4700	13400	8290	3030	4230	2630	1600	1140

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

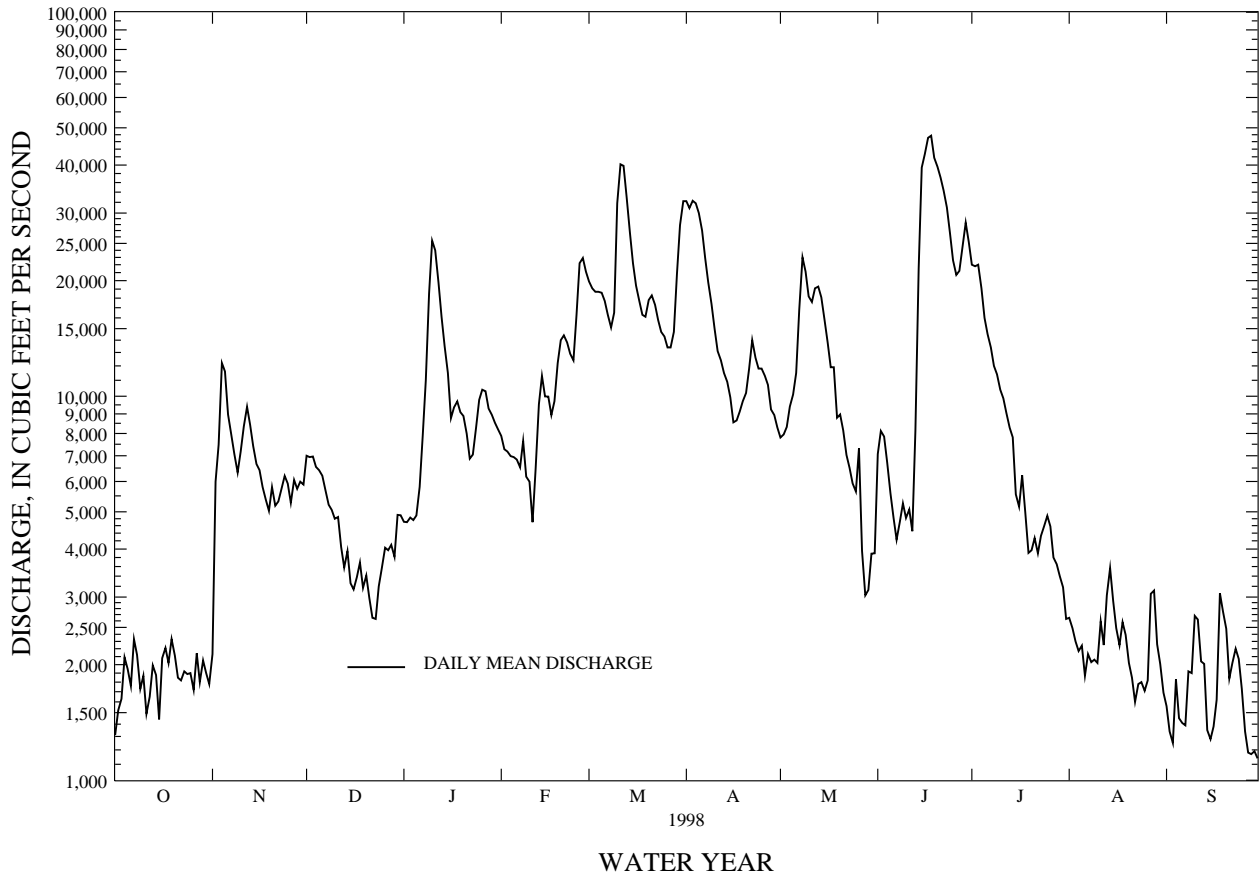
MEAN	4151	6642	7678	7166	7531	12930	19390	11710	6376	3437	2816	2938
MAX	12730	17690	20380	18530	18400	45780	37440	24770	23660	14520	11110	19650
(WY)	1978	1928	1997	1978	1970	1936	1987	1954	1984	1973	1990	1938
MIN	1036	1843	2127	1621	2105	4132	6979	4093	1825	1161	901	895
(WY)	1965	1965	1930	1925	1931	1940	1995	1941	1964	1965	1965	1957

MERRIMACK RIVER BASIN

01100000 MERRIMACK RIVER BELOW CONCORD RIVER AT LOWELL, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1923 - 1998	
ANNUAL TOTAL	2865132		3499190			
ANNUAL MEAN	7850		9587		7727	
HIGHEST ANNUAL MEAN					12490	
LOWEST ANNUAL MEAN					3068	
HIGHEST DAILY MEAN	42600	Apr 20	47700	Jun 18	161000	Mar 20 1936
LOWEST DAILY MEAN	768	Aug 8	1140	Sep 30	199	Sep 23 1923
ANNUAL SEVEN-DAY MINIMUM	997	Aug 6	1400	Sep 24	581	Sep 12 1995
INSTANTANEOUS PEAK FLOW			50400	Jun 18	173000	Mar 20 1936
INSTANTANEOUS PEAK STAGE			52.74	Jun 18	68.40	Mar 20 1936
INSTANTANEOUS LOW FLOW			427	Oct 7		
10 PERCENT EXCEEDS	17700		21900		17200	
50 PERCENT EXCEEDS	5890		6660		5180	
90 PERCENT EXCEEDS	1710		1850		1640	

MERRIMACK RIVER BELOW CONCORD RIVER AT LOWELL, MA 01100000



## MERRIMACK RIVER BASIN

01100568 SHAWSHOEN RIVER AT HANSCOM FIELD NEAR BEDFORD, MA

LOCATION.--Lat 42°28'01", long 71°16'22", Middlesex County, Hydrologic Unit 01070002, on left bank 300 ft downstream from FAA hangar, on Hanscom Field (revised), and 1.6 mi south of Bedford.

DRAINAGE AREA.--2.09 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: October 1995 to current year.  
Precipitation: March 1996 to current year.

GAGE.--Water-stage recorder and tipping bucket rain gage. Elevation of gage is 115 ft above sea level, from topographic map. Telephone gage-height and rainfall telemeter at station.

REMARKS.--Records fair except those above 100 ft<sup>3</sup>/s and those for estimated daily discharge, which are poor. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service.

AVERAGE DISCHARGE.--3 years, 5.45 ft<sup>3</sup>/s, 35.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 684 ft<sup>3</sup>/s, June 13, 1998, gage height, 8.69 ft, from rating curve extended above 170 ft<sup>3</sup>/s; minimum, 0.52 ft<sup>3</sup>/s, Oct. 1-6, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 684 ft<sup>3</sup>/s, June 13, gage height, 8.69 ft, from rating curve extended above 170 ft<sup>3</sup>/s; minimum, 0.52 ft<sup>3</sup>/s, Oct. 1-6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.53	37	9.1	2.8	3.4	7.2	6.0	3.0	20	12	2.5	1.6
2	.52	15	2.9	2.7	3.4	5.2	7.0	9.5	3.6	5.1	2.3	1.8
3	1.7	1.8	2.6	3.0	3.7	4.8	4.4	8.6	7.9	4.3	2.2	1.6
4	.54	1.4	2.9	4.5	3.7	4.4	4.0	5.8	3.3	4.0	2.1	1.6
5	2.9	1.4	2.8	3.9	3.7	4.2	3.7	14	3.1	3.7	2.1	1.4
6	.58	1.3	2.4	4.7	3.6	3.9	3.6	37	3.0	3.6	2.1	1.5
7	.63	1.4	2.3	10	3.1	3.8	3.4	15	11	3.4	3.3	2.5
8	.59	3.1	2.0	18	3.0	4.7	4.2	7.3	10	3.4	2.1	1.5
9	.63	19	2.0	11	3.0	50	4.7	5.9	3.9	3.3	2.0	1.5
10	.71	3.8	2.0	5.3	3.0	25	4.4	35	3.3	3.2	2.0	1.4
11	.78	2.0	1.9	4.2	3.6	7.9	3.4	26	3.1	3.1	4.4	1.4
12	.82	1.8	1.8	3.7	20	6.2	3.2	13	3.2	3.0	2.2	1.3
13	.83	1.6	1.7	4.1	5.9	5.2	3.2	7.2	205	2.9	1.9	1.3
14	.83	1.8	1.6	3.3	4.2	5.2	3.0	6.1	166	2.8	1.8	1.3
15	.85	2.3	1.6	3.1	3.6	4.7	3.0	5.4	63	e2.8	1.8	2.3
16	.86	2.0	1.6	3.1	3.3	4.4	3.0	4.9	31	e2.6	1.8	1.7
17	1.2	1.8	1.5	3.0	3.3	4.2	5.7	4.6	18	e2.3	18	1.1
18	.72	1.7	1.6	2.8	32	4.3	3.3	4.3	10	e2.2	2.4	1.1
19	.79	1.7	1.9	2.9	9.4	23	3.0	4.0	8.1	e2.4	2.1	1.1
20	.83	1.7	1.8	2.9	6.1	8.6	11	3.8	7.0	e2.3	1.9	1.1
21	.85	2.2	1.8	2.7	5.1	6.4	3.7	3.7	6.2	e2.3	1.9	1.1
22	.81	13	1.8	2.5	4.5	6.0	3.1	3.4	5.7	e20	1.8	18
23	.88	3.3	1.9	4.2	4.1	6.4	12	3.3	5.3	e9.6	1.8	1.5
24	.80	2.7	2.0	53	36	6.4	7.7	3.2	5.0	e4.5	5.1	1.3
25	3.1	2.4	5.4	11	20	5.6	4.6	3.1	4.7	e3.4	1.7	1.3
26	.60	2.5	3.9	5.2	7.8	5.6	3.7	3.1	8.7	e3.4	2.2	1.2
27	9.1	2.9	2.6	4.3	6.2	5.3	3.5	2.9	7.2	e3.8	1.7	1.4
28	.79	2.6	2.3	4.0	5.6	4.9	3.3	2.9	4.4	2.6	1.7	1.1
29	.86	2.5	3.8	4.0	---	4.6	3.1	5.0	4.2	8.0	1.9	1.1
30	.92	5.2	18	3.8	---	4.3	3.1	3.2	23	2.6	1.7	1.2
31	.80	---	3.6	3.6	---	4.1	---	14	---	8.7	1.8	---
TOTAL	37.35	142.9	95.1	197.3	214.3	246.5	135.0	268.2	657.9	141.3	84.3	59.3
MEAN	1.20	4.76	3.07	6.36	7.65	7.95	4.50	8.65	21.9	4.56	2.72	1.98
MAX	9.1	37	18	53	36	50	12	37	205	20	18	18
MIN	.52	1.3	1.5	2.5	3.0	3.8	3.0	2.9	3.0	2.2	1.7	1.1
CFSM	.58	2.28	1.47	3.05	3.66	3.80	2.15	4.14	10.5	2.18	1.30	.95
IN.	.66	2.54	1.69	3.51	3.81	4.39	2.40	4.77	11.71	2.52	1.50	1.06

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

	1995	1996	1997	1998
MEAN	8.22	4.79	4.47	6.06
MAX	19.6	4.88	8.14	6.81
(WY)	1997	1997	1997	1998
MIN	1.20	4.73	2.19	5.02
(WY)	1998	1996	1996	1997

MERRIMACK RIVER BASIN

01100568 SHAWSHEEN RIVER AT HANSCOM FIELD NEAR BEDFORD, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1995 - 1998	
ANNUAL TOTAL	1266.25		2279.45			
ANNUAL MEAN	3.47		6.25		5.45	
HIGHEST ANNUAL MEAN					6.25 1998	
LOWEST ANNUAL MEAN					4.62 1996	
HIGHEST DAILY MEAN	37	Nov 1	205	Jun 13	209	Oct 21 1996
LOWEST DAILY MEAN	.52	Oct 2	.52	Oct 2	.52	Oct 2 1997
ANNUAL SEVEN-DAY MINIMUM	.68	Oct 6	.68	Oct 6	.68	Oct 6 1997
INSTANTANEOUS PEAK FLOW			684	Jun 13	684	Jun 13 1998
INSTANTANEOUS PEAK STAGE			8.69	Jun 13	8.69	Jun 13 1998
INSTANTANEOUS LOW FLOW			.52	Oct 1	.52	Oct 1 1997
ANNUAL RUNOFF (CFSM)	1.66		2.99		2.61	
ANNUAL RUNOFF (INCHES)	22.54		40.57		35.40	
10 PERCENT EXCEEDS	7.0		11		8.5	
50 PERCENT EXCEEDS	2.5		3.2		3.2	
90 PERCENT EXCEEDS	.99		1.3		1.3	

e Estimated

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998  
DAILY SUM VALUES

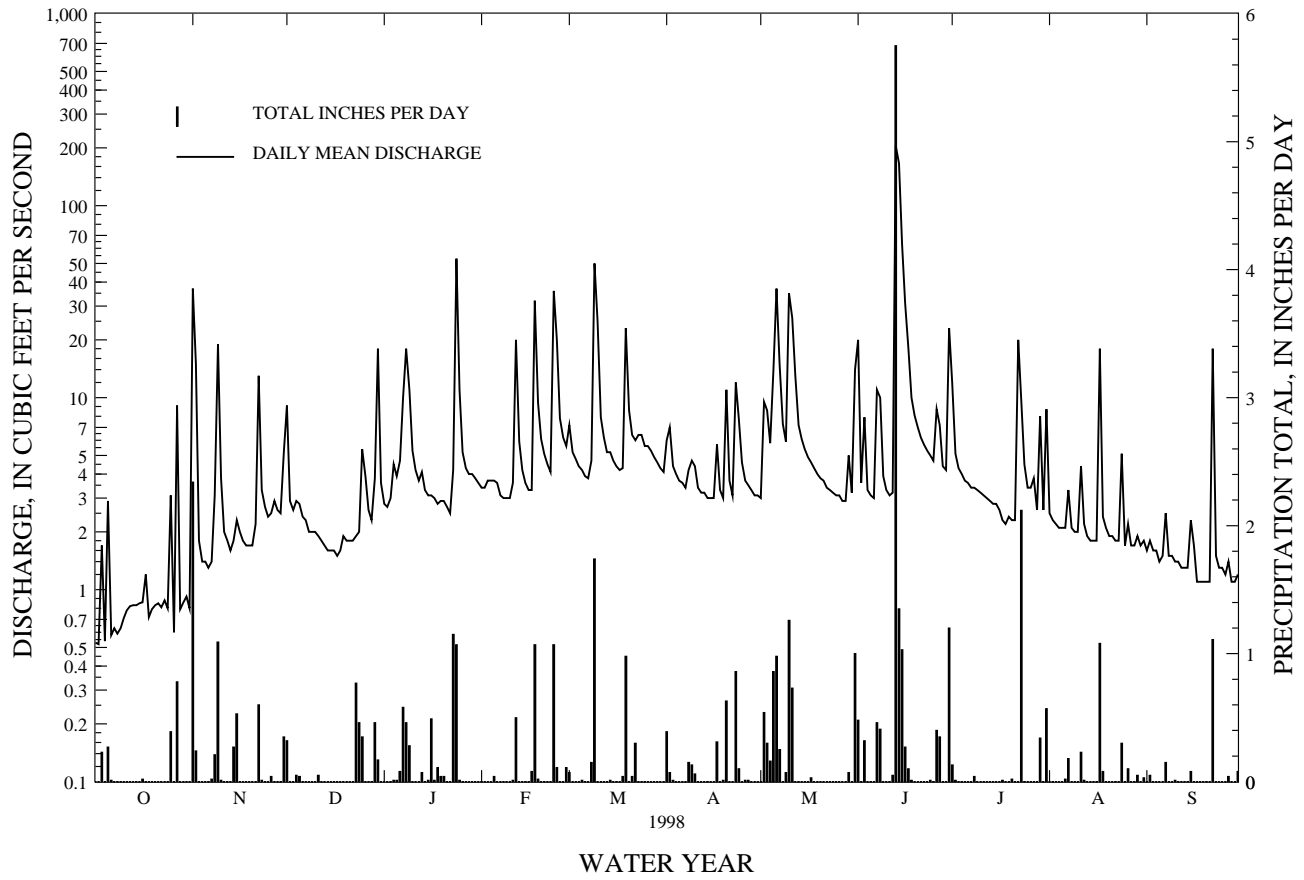
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	2.34	0.32	0.00	0.00	0.07	0.39	0.00	0.48	0.13	0.00	0.00
2	.00	.24	.00	.00	.00	.00	.07	.54	.00	.01	.00	.05
3	.23	.00	.00	.00	.00	.00	.01	.30	.32	.00	.00	.00
4	.00	.00	.05	.01	.00	.00	.00	.16	.00	.00	.00	.00
5	.27	.00	.04	.01	.04	.01	.00	.86	.00	.00	.00	.00
6	.01	.00	.00	.08	.00	.00	.00	.98	.00	.00	.02	.00
7	.00	.02	.00	.58	.00	.00	.00	.25	.46	.00	.18	.15
8	.00	.21	.00	.46	.00	.15	.15	.00	.41	.04	.00	.00
9	.00	1.09	.00	.28	.00	1.74	.13	.07	.00	.00	.00	.00
10	.00	.01	.00	.00	.00	.00	.06	1.26	.00	.00	.00	.01
11	.00	.00	.05	.00	.01	.00	.00	.73	.00	.00	.23	.00
12	.00	.00	.00	.00	.50	.00	.00	.00	.05	.00	.01	.00
13	.00	.00	.00	.07	.00	.00	.00	.00	5.75	.00	.00	.00
14	.00	.27	.00	.00	.00	.01	.00	.00	1.35	e.00	.00	.00
15	.00	.53	.00	.01	.00	.00	.00	.00	1.03	e.00	.00	.08
16	.02	.00	.00	.49	.00	.00	.00	.00	.27	e.00	.00	.00
17	.00	.00	.00	.01	.08	.00	.31	.03	.10	e.01	1.08	.00
18	.00	.00	.00	.11	1.07	.04	.00	.00	.01	e.00	.08	.00
19	.00	.00	.00	.04	.02	.98	.01	.00	.00	e.00	.00	.00
20	.00	.00	.00	.04	.00	.00	.63	.00	.00	e.02	.00	.00
21	.00	.00	.00	.00	.00	.04	.00	.00	.00	e.00	.00	.00
22	.00	.60	.00	.00	.00	.30	.00	.00	.00	e.00	.00	1.11
23	.00	.01	.77	1.15	.00	.00	.86	.00	.00	e2.12	.00	.00
24	.00	.00	.46	1.07	1.07	.00	.10	.00	.01	e.00	.30	.00
25	.39	.00	.35	.01	.11	.00	.00	.00	.00	e.00	.00	.00
26	.00	.04	.00	.00	.00	.00	.01	.00	.40	e.00	.10	.00
27	.78	.00	.00	.00	.00	.00	.01	.00	.35	e.00	.00	.04
28	.00	.00	.00	.00	.11	.00	.00	.00	.00	e.00	.00	.00
29	.00	.00	.46	.00	---	.00	.00	.07	.00	.34	.05	.00
30	.00	.35	.17	.00	---	.00	.00	.00	1.20	.00	.00	.08
31	.00	---	.00	.00	---	.00	---	1.00	---	.57	.03	---
TOTAL	1.70	5.71	2.67	4.42	3.01	3.34	2.74	6.25	12.19	3.24	2.08	1.52

WTR YR 1998 TOTAL 48.87

e Estimated



SHAWSHEEN RIVER AT HANSCOM FIELD NEAR BEDFORD, MA 01100568



MERRIMACK RIVER BASIN

01100568 SHAWSHEEN RIVER AT HANSCOM FIELD NEAR BEDFORD, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (MG/L) (00300)	OXYGEN, SATUR-ATION (PER-CENT) (00301)	COLI-FORM, FECA-L, UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	STREP-TOCOCCI FECA-L, KF AGAR (COLS. PER 100 ML) (31673)
------	------	---	---	--	----------------------------------	------------------------------------	--	-----------------------------------	--	---	--	--

APR	29...	0930	3.1	473	6.9	15.0	10.0	762	10.9	94	54	40	K36
JUL	22...	0900	20	435	6.9	32.0	18.0	750	7.7	83	220	110	140
SEP	09...	1145	1.5	438	7.0	19.0	16.5	747	7.1	10	110	51	75

DATE	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)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	HY-DROXIDE WATER DIS IT FIELD (MG/L AS OH) (71834)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
------	---	---	---	---	------------------------	-----------------------------------	--	--	---	--	--	--

APR	29...	77	24	4.4	56	60	3	3.7	44	0	0	36	25
JUL	22...	76	24	4.3	51	58	3	4.2	45	0	0	37	25
SEP	09...	82	25	4.6	50	55	2	4.5	45	0	0	37	26

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
------	--	---	---	---	---	---	---	---	---	--	---	--

APR	29...	96	<0.10	12	267	248	0.011	0.921	0.143	0.18	0.22	0.36	0.25
JUL	22...	85	<.10	14	256	234	.013	.884	.112	.14	.17	.28	.48
SEP	09...	83	<.10	15	251	234	.017	.858	.117	.15	.15	.27	.24

## MERRIMACK RIVER BASIN

01100568 SHAWSHEEN RIVER AT HANSCOM FIELD NEAR BEDFORD, MA--Continued

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
APR 29...	1.3	<0.010	<0.010	0.019	33	<1.0	2	25	<1.0	<1.0	1.1	1.1
JUL 22...	1.2	<.010	<.010	<.010	--	--	--	--	--	--	--	--
SEP 09...	1.1	<.010	.013	.015	--	--	--	--	--	--	--	--

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
APR 29...	1.0	490	<1.0	275	<1.0	2.6	<1	<1.0	12	<1.0	3.2
JUL 22...	--	210	--	259	--	--	--	--	--	--	3.1
SEP 09...	--	310	--	249	--	--	--	--	--	--	3.3



Remains of support piling for the Middlesex Canal (National Historic Landmark), operated from about 1793 to 1853, Shawsheen River, Wilmington, Mass. (photo by R. S. Socolow).



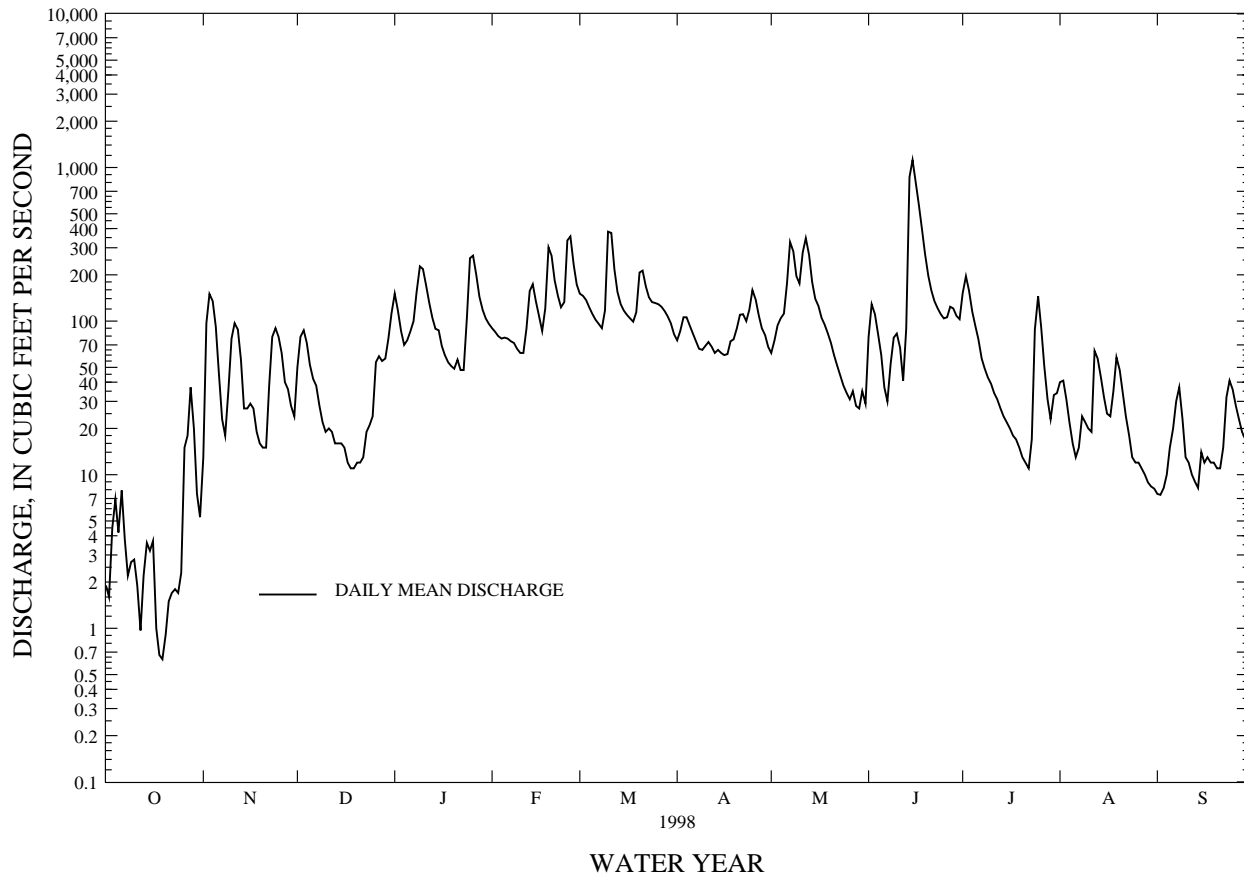
MERRIMACK RIVER BASIN

01100600 SHAWSHEEN RIVER NEAR WILMINGTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1964 - 1998	
ANNUAL TOTAL	17158.98		30692.78			
ANNUAL MEAN	47.0		84.1		59.8	
HIGHEST ANNUAL MEAN					107 1984	
LOWEST ANNUAL MEAN					28.2 1966	
HIGHEST DAILY MEAN	353	Apr 20	1120	Jun 15	1610	Oct 22 1996
LOWEST DAILY MEAN	.63	Oct 19	.63	Oct 19	.63	Oct 19 1997
ANNUAL SEVEN-DAY MINIMUM	1.2	Oct 17	1.2	Oct 17	1.0	Sep 2 1995
INSTANTANEOUS PEAK FLOW			1240	Jun 15	1850	Oct 22 1996
INSTANTANEOUS PEAK STAGE			9.03	Jun 15	10.49	Oct 22 1996
INSTANTANEOUS LOW FLOW			.60	Oct 19	.70	Aug 19 1983
10 PERCENT EXCEEDS	100		170		129	
50 PERCENT EXCEEDS	29		61		38	
90 PERCENT EXCEEDS	5.3		10		7.8	

e Estimated

SHAWSHEEN RIVER NEAR WILMINGTON, MA 01100600





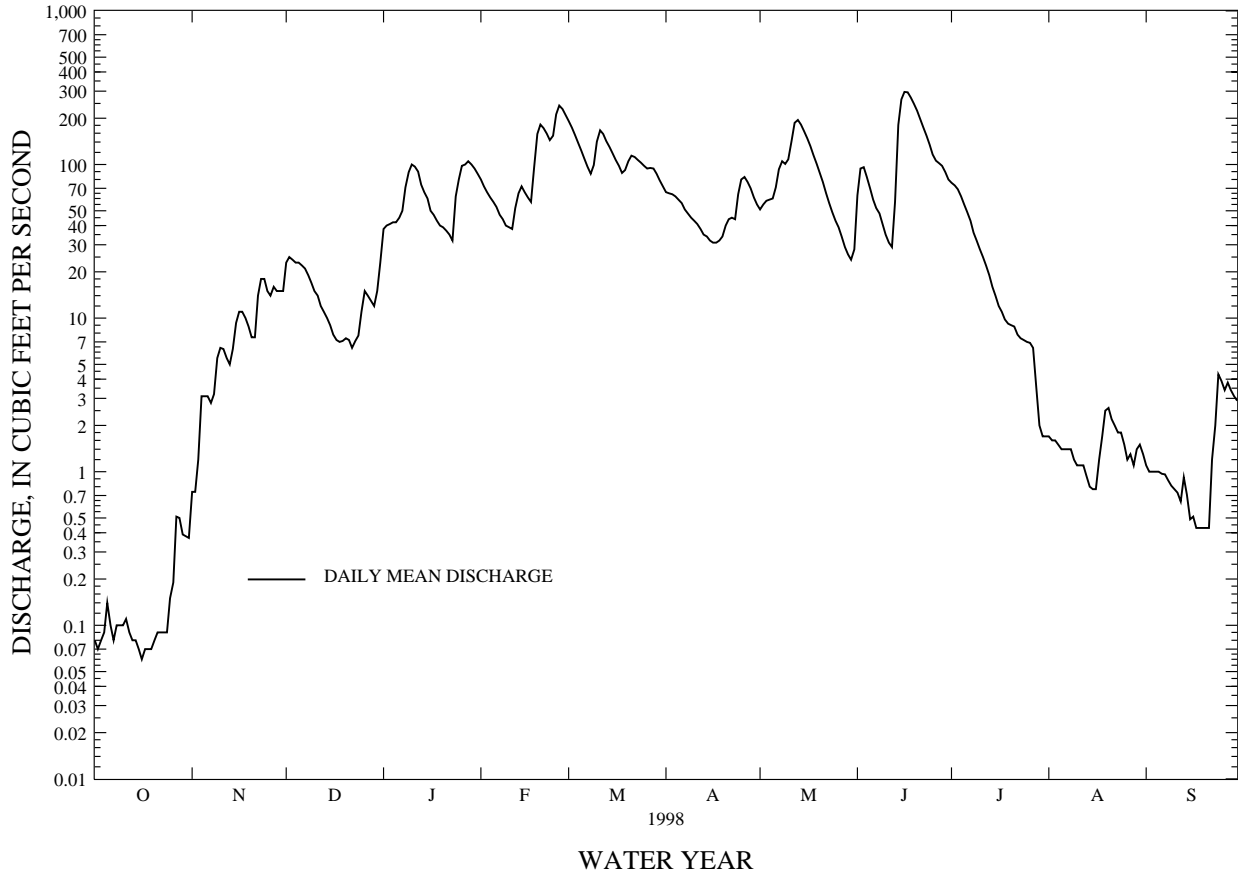
PARKER RIVER BASIN

01101000 PARKER RIVER AT BYFIELD, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1946 - 1998	
ANNUAL TOTAL	11201.52		18028.47			
ANNUAL MEAN	30.7		49.4		37.4	
HIGHEST ANNUAL MEAN					64.8	1984
LOWEST ANNUAL MEAN					13.2	1966
HIGHEST DAILY MEAN	189	Apr 20	297	Jun 16	858	Oct 22 1996
LOWEST DAILY MEAN	.06	Oct 16	.06	Oct 16	.04	Sep 3 1995
ANNUAL SEVEN-DAY MINIMUM	.07	Oct 13	.07	Oct 13	.04	Sep 2 1995
INSTANTANEOUS PEAK FLOW			302	Jun 16	883	Oct 22 1997
INSTANTANEOUS PEAK STAGE			4.26	Jun 16	7.82	Oct 22 1997
INSTANTANEOUS LOW FLOW			.05	Oct 16		
ANNUAL RUNOFF (CFSM)	1.44		2.32		1.76	
ANNUAL RUNOFF (INCHES)	19.56		31.49		23.86	
10 PERCENT EXCEEDS	82		131		89	
50 PERCENT EXCEEDS	14		31		24	
90 PERCENT EXCEEDS	.10		.51		1.5	

e Estimated

PARKER RIVER AT BYFIELD, MA 01101000





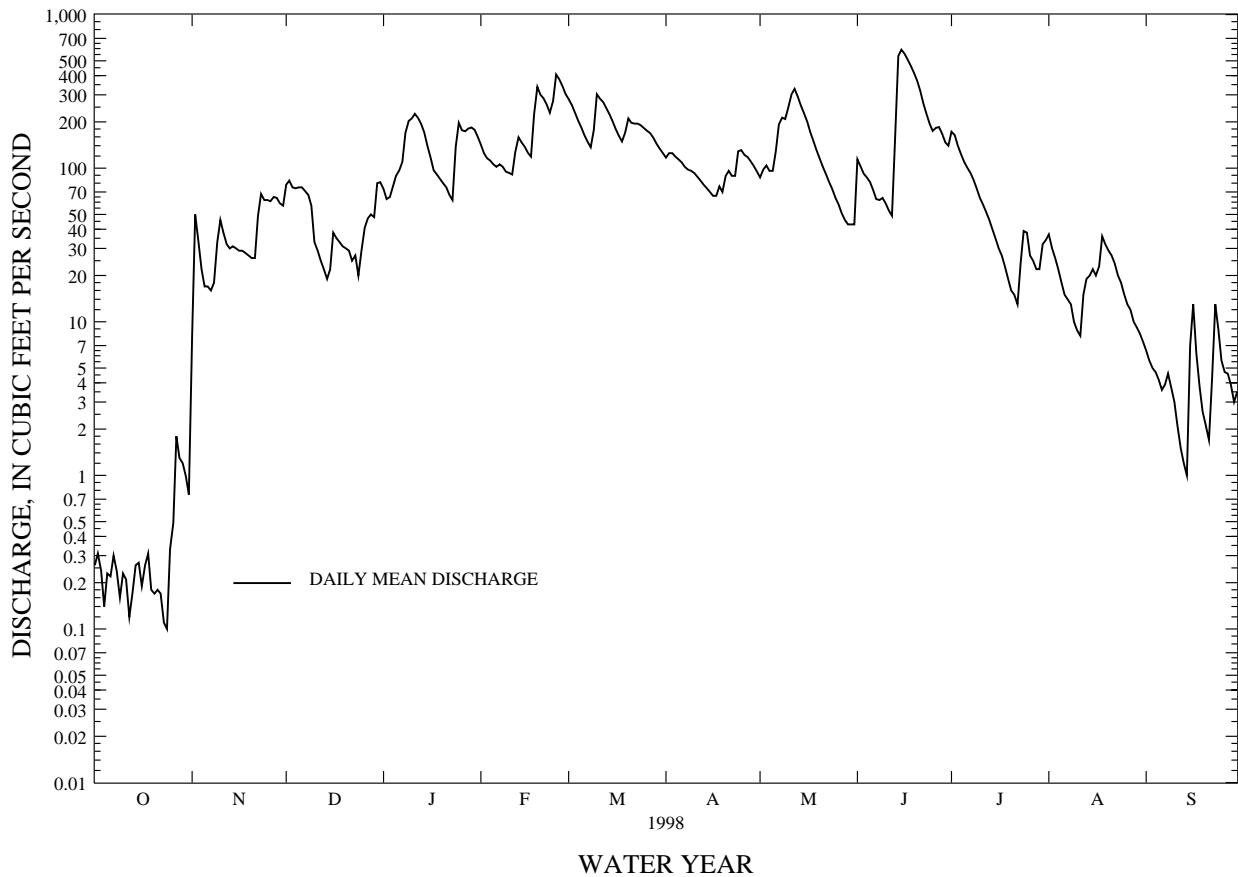


IPSWICH RIVER BASIN

01101500 IPSWICH RIVER AT SOUTH MIDDLETON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1938 - 1998
ANNUAL TOTAL	19729.97	34421.39	
ANNUAL MEAN	54.1	94.3	64.2
HIGHEST ANNUAL MEAN			121 1984
LOWEST ANNUAL MEAN			18.6 1966
HIGHEST DAILY MEAN	297 Apr 5	591 Jun 15	995 Apr 7 1987
LOWEST DAILY MEAN	.05 Sep 7	.10 Oct 24	.05 Sep 7 1997
ANNUAL SEVEN-DAY MINIMUM	.08 Sep 5	.17 Oct 18	.08 Sep 5 1997
INSTANTANEOUS PEAK FLOW		604 Jun 15	1010 Apr 7 1987
INSTANTANEOUS PEAK STAGE		6.69 Jun 15	7.88 Oct 21 1996
INSTANTANEOUS LOW FLOW		.07 Oct 12	.05 Sep 6 1997
10 PERCENT EXCEEDS	114	217	156
50 PERCENT EXCEEDS	35	67	38
90 PERCENT EXCEEDS	.14	2.1	2.2

IPSWICH RIVER AT SOUTH MIDDLETON, MA 01101500



IPSWICH RIVER BASIN

01102000 IPSWICH RIVER NEAR IPSWICH, MA

LOCATION.--Lat 42°39'35", long 70°53'39", Essex County, Hydrologic Unit 01090001, on left bank 200 ft downstream from Willowdale Dam, 1.5 mi downstream from Howlett Brook, and 4 mi upstream from Ipswich.

DRAINAGE AREA.--125 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: June 1930 to current year.  
Water-quality records: Water years 1954, 1976-79.

REVISED RECORDS.--WSP 1621: 1930-58 (monthly runoff). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 20.63 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversions upstream for municipal supply of Reading, Lynn, Peabody, Danvers, Salem, and Beverly. Some regulation by reservoirs upstream. Telephone and satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--68 years, 190 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft<sup>3</sup>/s, Apr. 8, 1987, gage height, 9.43 ft; minimum, 0.34 ft<sup>3</sup>/s, Sept. 20, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1886, that of Apr. 8, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,950 ft<sup>3</sup>/s, June 17, gage height, 7.20 ft; minimum, 2.5 ft<sup>3</sup>/s, Oct. 19, 20, 23; minimum daily, 2.6 ft<sup>3</sup>/s, Oct. 15, 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	22	e108	120	411	1100	352	313	199	453	83	24
2	3.4	48	e107	136	385	943	338	306	221	445	83	23
3	3.3	57	105	143	364	812	328	301	261	431	80	21
4	3.4	e100	105	151	342	709	330	298	290	414	73	20
5	3.9	e80	108	152	315	619	336	304	291	386	62	18
6	4.3	64	106	155	288	549	334	330	273	353	53	17
7	4.3	55	97	168	265	492	322	382	247	321	49	15
8	3.9	53	87	220	246	446	308	432	222	295	48	15
9	3.9	67	75	285	232	460	295	476	202	271	42	15
10	3.8	74	63	351	229	609	281	559	186	247	38	14
11	3.3	80	49	401	226	755	267	736	171	225	35	14
12	2.9	83	53	413	253	834	256	1020	160	204	68	13
13	2.8	81	56	391	289	761	238	1060	223	185	83	12
14	2.8	78	56	374	332	673	223	995	643	168	78	11
15	2.6	72	49	341	356	603	212	868	1220	151	68	9.1
16	2.7	68	49	280	363	556	201	743	1720	135	59	8.7
17	2.8	64	50	260	338	511	195	643	1940	120	59	15
18	2.7	46	47	249	429	469	194	564	1880	106	70	19
19	2.6	e46	44	233	678	466	191	497	1690	95	76	16
20	2.7	e47	42	217	909	501	207	441	1490	80	78	13
21	2.8	e48	39	202	956	538	223	393	1310	68	75	11
22	2.8	e60	37	182	863	584	234	349	1080	58	68	14
23	3.2	e74	31	158	751	573	241	312	914	59	62	21
24	11	e96	31	225	829	541	297	285	784	78	56	26
25	8.5	e100	47	282	1240	514	344	253	679	89	49	25
26	4.7	e103	64	359	1400	496	385	229	612	93	42	22
27	5.8	e105	79	434	1400	480	399	211	561	91	38	20
28	6.6	e105	83	477	1270	457	385	190	516	82	33	17
29	8.8	e108	78	473	---	432	361	171	482	73	30	19
30	16	e108	114	455	---	409	337	155	459	67	28	26
31	11	---	133	434	---	381	---	146	---	77	26	---
TOTAL	147.1	2192	2192	8721	15959	18273	8614	13962	20926	5920	1792	513.8
MEAN	4.75	73.1	70.7	281	570	589	287	450	698	191	57.8	17.1
MAX	16	108	133	477	1400	1100	399	1060	1940	453	83	26
MIN	2.6	22	31	120	226	381	191	146	160	58	26	8.7

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

	79.3	136	194	211	245	451	437	243	148	57.5	36.7	41.6
MEAN	79.3	136	194	211	245	451	437	243	148	57.5	36.7	41.6
MAX	749	525	621	566	627	1158	1233	833	821	518	356	390
(WY)	1997	1933	1997	1958	1984	1983	1987	1954	1982	1938	1938	1954
MIN	4.75	6.87	11.5	14.4	16.4	75.0	97.1	87.0	25.6	5.75	2.13	1.76
(WY)	1998	1966	1966	1966	1980	1989	1985	1985	1976	1957	1965	1965

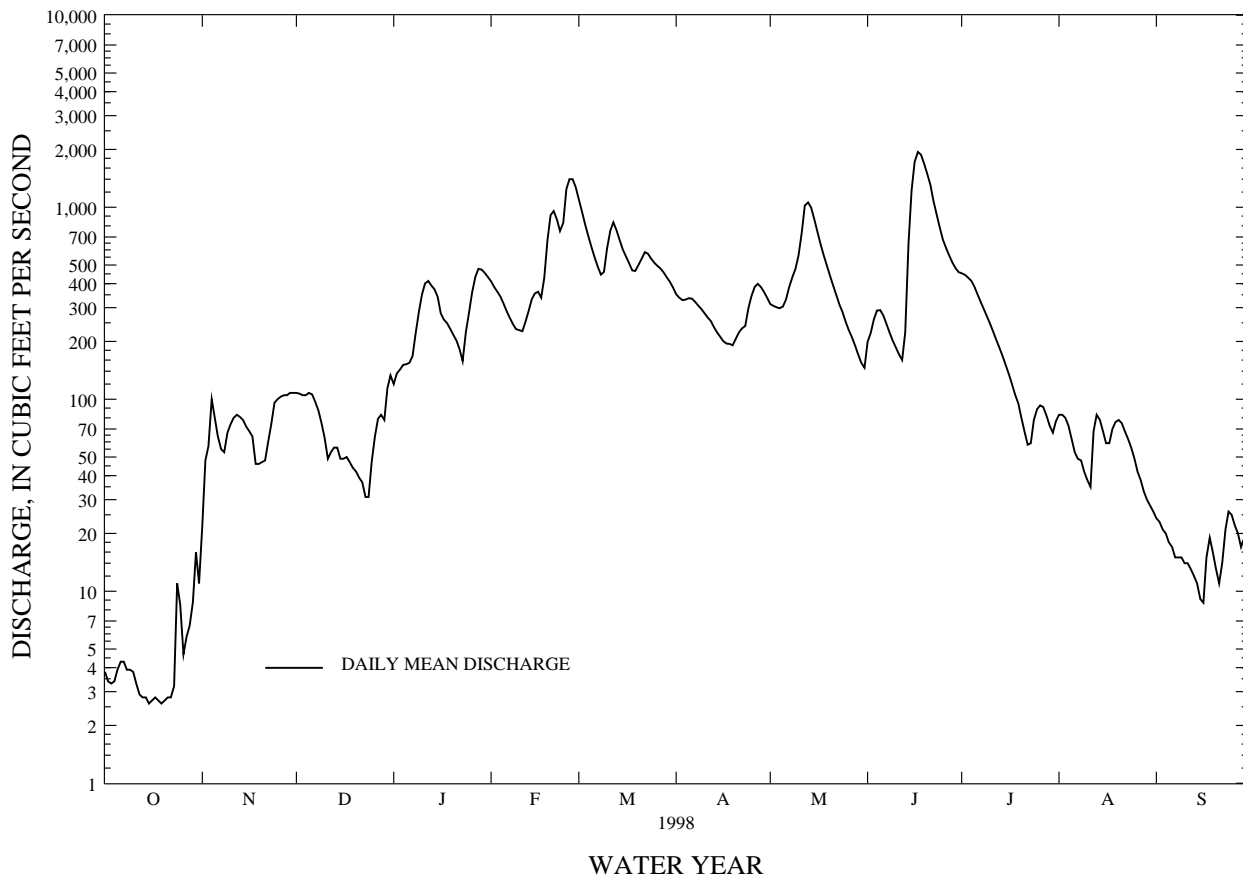
IPSWICH RIVER BASIN

01102000 IPSWICH RIVER NEAR IPSWICH, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1930 - 1998	
ANNUAL TOTAL	58510.8		99211.9		190	
ANNUAL MEAN	160		272		351	
HIGHEST ANNUAL MEAN					57.7	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	1000	Apr 7	1940	Jun 17	3520	Apr 8 1987
LOWEST DAILY MEAN	2.6	Oct 15	2.6	Oct 15	.59	Sep 21 1978
ANNUAL SEVEN-DAY MINIMUM	2.7	Oct 14	2.7	Oct 14	.94	Aug 21 1965
INSTANTANEOUS PEAK FLOW			1950	Jun 17	3550	Apr 8 1987
INSTANTANEOUS PEAK STAGE			7.20	Jun 17	9.43	Apr 8 1987
INSTANTANEOUS LOW FLOW			2.5	Oct 19	.34	Sep 20 1978
10 PERCENT EXCEEDS	372		643		450	
50 PERCENT EXCEEDS	80		171		114	
90 PERCENT EXCEEDS	3.8		13		12	

e Estimated

IPSWICH RIVER NEAR IPSWICH, MA 01102000



## SAUGUS RIVER BASIN

01102345 SAUGUS RIVER AT SAUGUS IRONWORKS AT SAUGUS, MA

LOCATION.--Lat 42°28'05", long 71°00'27", Essex County, Hydrologic Unit 01090001, on left bank 20 ft upstream from Bridge Street opposite Saugus Ironworks National Historic Site, at Saugus.

DRAINAGE AREA.--23.3 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water stage recorder. Elevation of gage is 15 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. There is evidence of seasonal regulation by ponds upstream. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--4 years, 33.7 ft<sup>3</sup>/s, 19.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 942 ft<sup>3</sup>/s, Oct. 21, 1996, gage height, 6.58 ft; minimum, about 0.60 ft<sup>3</sup>/s, Sept. 5, 6, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 577 ft<sup>3</sup>/s, June 14, gage height, 5.70 ft; minimum, 1.0 ft<sup>3</sup>/s, Oct. 15

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	19	27	37	51	e120	49	25	52	112	11	3.3
2	1.3	47	22	25	42	110	61	40	31	79	6.4	3.2
3	1.8	31	15	22	33	89	55	32	31	67	5.2	3.4
4	2.2	13	14	24	29	83	50	24	26	53	4.7	2.9
5	3.6	8.3	14	25	27	78	47	24	25	45	4.4	2.6
6	3.3	6.6	13	26	25	73	45	69	24	42	4.2	2.3
7	2.1	5.6	11	34	22	63	43	136	17	40	4.2	2.7
8	1.6	8.6	10	72	20	58	42	120	14	28	4.1	3.3
9	1.5	33	9.4	70	18	110	44	86	13	20	3.5	2.7
10	1.4	34	8.9	60	17	182	43	162	11	23	3.2	2.4
11	1.4	19	8.3	52	17	126	36	184	8.3	20	3.3	e2.2
12	1.2	12	7.9	44	55	112	33	179	7.0	17	4.4	e1.9
13	1.2	9.4	8.1	40	61	103	32	136	160	16	3.8	1.7
14	1.1	9.6	8.4	e33	46	98	20	116	511	15	3.3	1.8
15	1.1	11	e7.8	e32	e34	90	14	104	373	11	2.9	1.9
16	1.2	11	7.7	e31	35	64	13	89	316	7.3	2.7	2.2
17	1.2	9.5	8.2	e30	33	53	18	71	251	6.0	14	1.9
18	1.2	8.3	8.2	e27	158	51	23	61	223	5.4	20	1.8
19	1.2	7.6	7.8	26	197	98	15	56	208	4.8	12	1.8
20	1.2	7.2	8.1	24	129	116	40	45	188	4.5	6.0	e1.6
21	1.2	7.5	8.1	23	119	92	31	40	158	5.0	4.7	e1.8
22	1.1	28	e7.0	21	100	87	21	37	139	4.8	4.2	e2.2
23	1.1	29	e7.0	26	88	90	30	29	129	22	3.8	e14
24	1.2	18	e7.0	195	192	87	96	24	123	34	4.9	e5.4
25	3.6	14	16	176	253	84	87	23	104	14	4.1	3.9
26	4.1	12	27	114	179	81	77	22	94	9.1	4.1	3.5
27	11	12	25	91	e150	79	58	21	80	7.6	3.8	3.5
28	8.1	11	19	77	e130	73	48	20	71	6.7	3.2	3.1
29	3.9	9.2	e15	74	---	68	43	16	59	7.5	4.9	2.6
30	2.9	9.6	69	75	---	56	39	15	76	7.8	4.4	2.5
31	2.5	---	56	64	---	50	---	18	---	13	3.6	---
TOTAL	73.0	461.0	480.9	1670	2260	2724	1253	2024	3522.3	747.5	169.0	90.1
MEAN	2.35	15.4	15.5	53.9	80.7	87.9	41.8	65.3	117	24.1	5.45	3.00
MAX	11	47	69	195	253	182	96	184	511	112	20	14
MIN	1.1	5.6	7.0	21	17	50	13	15	7.0	4.5	2.7	1.6
CFSM	.10	.66	.67	2.31	3.46	3.77	1.79	2.80	5.04	1.03	.23	.13
IN.	.12	.74	.77	2.67	3.61	4.35	2.00	3.23	5.62	1.19	.27	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1998, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998
MEAN	36.6	31.7	46.1	50.4	48.3	62.7
MAX	122	49.2	108	62.3	80.7	105
(WY)	1997	1997	1997	1996	1998	1994
MIN	2.35	15.4	15.5	38.9	18.8	26.8
(WY)	1998	1998	1998	1995	1995	1995

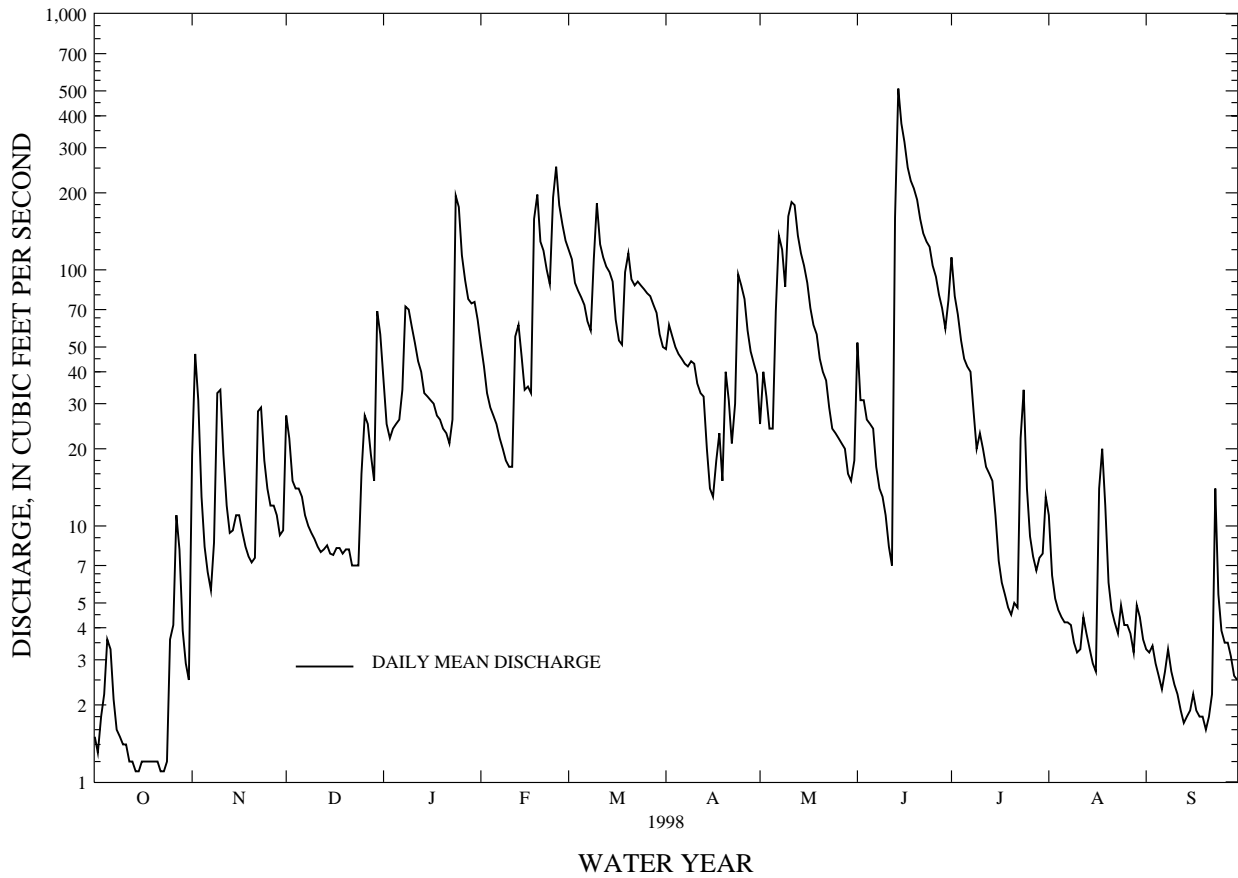
SAUGUS RIVER BASIN

01102345 SAUGUS RIVER AT SAUGUS IRONWORKS AT SAUGUS, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1993 - 1998	
ANNUAL TOTAL	8829.3		15474.8			
ANNUAL MEAN	24.2		42.4		33.7	
HIGHEST ANNUAL MEAN					45.0	
LOWEST ANNUAL MEAN					15.5	
HIGHEST DAILY MEAN	169		511		812	
LOWEST DAILY MEAN	1.0		1.1		.60	
ANNUAL SEVEN-DAY MINIMUM	1.2		1.2		.62	
INSTANTANEOUS PEAK FLOW			577		942	
INSTANTANEOUS PEAK STAGE			5.70		6.58	
INSTANTANEOUS LOW FLOW			1.0		.06	
ANNUAL RUNOFF (CFSM)	1.04		1.82		1.45	
ANNUAL RUNOFF (INCHES)	14.10		24.71		19.68	
10 PERCENT EXCEEDS	58		112		85	
50 PERCENT EXCEEDS	11		21		16	
90 PERCENT EXCEEDS	1.4		2.5		2.1	

e Estimated

SAUGUS RIVER AT SAUGUS IRONWORKS AT SAUGUS, MA 01102345





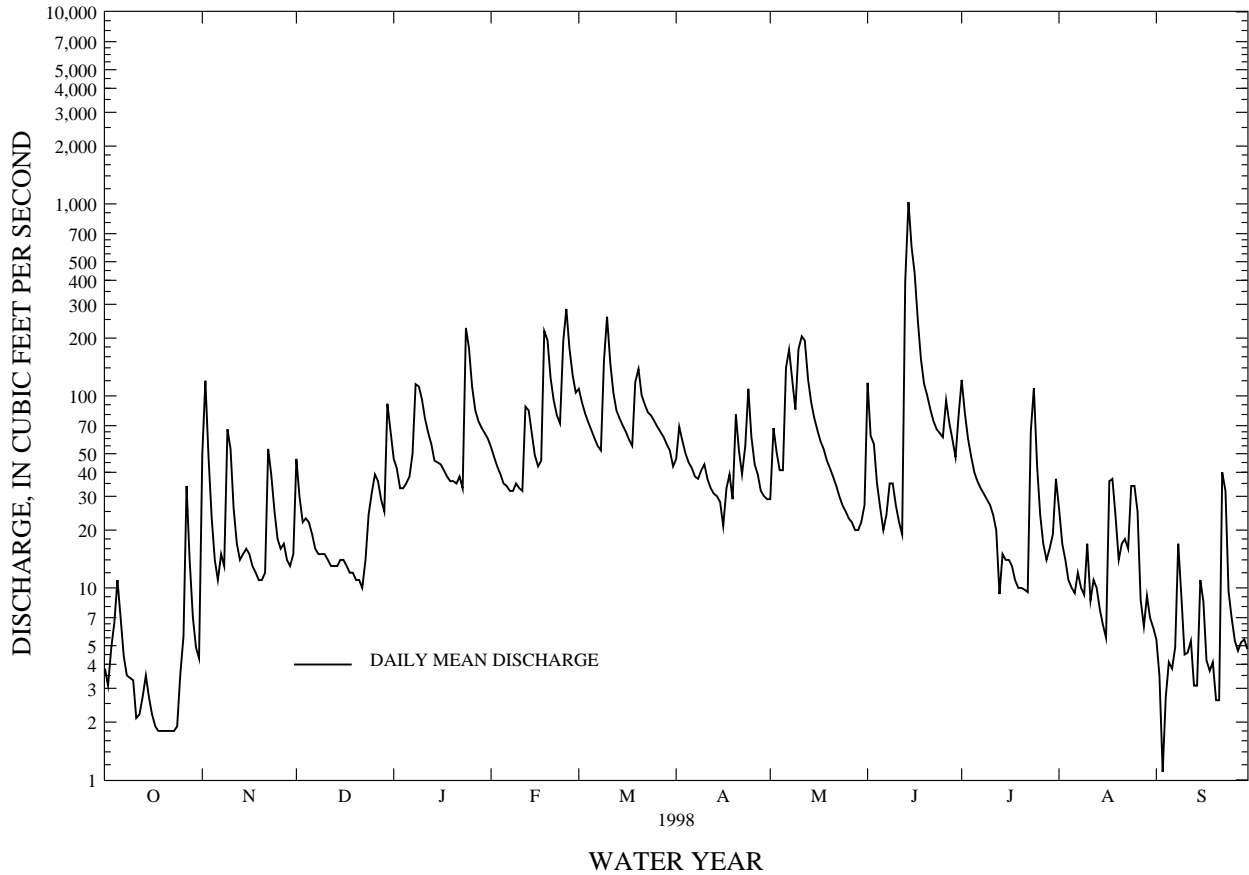
MYSTIC RIVER BASIN

01102500 ABERJONA RIVER AT WINCHESTER, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1939 - 1998	
ANNUAL TOTAL	9404.1		18322.5			
ANNUAL MEAN	25.8		50.2		29.6	
HIGHEST ANNUAL MEAN					58.3 1984	
LOWEST ANNUAL MEAN					8.23 1966	
HIGHEST DAILY MEAN	139	Apr 19	1020	Jun 14	1070	Oct 21 1996
LOWEST DAILY MEAN	1.8	Oct 18	1.1	Sep 3	.25	Oct 10 1950
ANNUAL SEVEN-DAY MINIMUM	1.8	Oct 17	1.8	Oct 17	.31	Dec 6 1941
INSTANTANEOUS PEAK FLOW			1070	Jun 14	1330	Jan 25 1979
INSTANTANEOUS PEAK STAGE			15.22	Jun 14	16.78	Oct 21 1996
INSTANTANEOUS LOW FLOW			1.0	Sep 3	.00	Oct 10 1950
10 PERCENT EXCEEDS	58		109		69	
50 PERCENT EXCEEDS	18		33		17	
90 PERCENT EXCEEDS	3.3		4.7		1.4	

e Estimated

ABERJONA RIVER AT WINCHESTER, MA 01102500





## CHARLES RIVER BASIN

01103280 CHARLES RIVER AT MEDWAY, MA

LOCATION.--Lat 42°08'23", long 71°23'24", Norfolk County, Hydrologic Unit 01090001, on right bank at upstream side of Walker Street bridge at intersection with Populatic Street, 0.5 mi east of Medway, MA.

DRAINAGE AREA.--65.7 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1997 to September 1998.

GAGE.--Water-stage recorder with satellite telemeter. Elevation of gage is 175 ft above sea level from topographic map.

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

EXTREMES FOR PERIOD NOVEMBER 1997 TO SEPTEMBER 1998.--Maximum discharge, 1,100 ft<sup>3</sup>/s, gage height, 5.34 ft, June 14; minimum, 13 ft<sup>3</sup>/s, Sept. 19-21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	73	e109	173	343	187	151	97	571	41	26
2	---	---	81	e82	157	318	252	183	97	601	38	24
3	---	---	68	77	151	288	263	197	119	505	33	21
4	---	---	60	89	152	257	253	200	112	381	28	20
5	---	---	58	107	152	230	231	224	92	297	25	18
6	---	---	54	116	144	204	208	311	70	240	22	16
7	---	---	49	130	131	183	186	424	61	193	20	17
8	---	---	45	216	122	166	e160	429	80	158	19	18
9	---	---	41	294	113	349	153	375	88	133	17	18
10	---	---	38	321	106	756	209	579	77	112	16	18
11	---	---	36	285	106	e760	e207	802	62	95	15	17
12	---	e59	33	233	211	e602	e198	769	53	83	15	17
13	---	49	32	192	269	e445	e185	624	358	73	15	16
14	---	44	31	159	279	e361	166	489	971	65	15	14
15	---	41	e25	e111	242	320	149	390	1050	56	15	14
16	---	40	e24	124	200	e285	139	324	941	50	14	14
17	---	36	26	e119	158	e247	149	278	727	46	28	14
18	---	33	25	115	320	235	183	250	744	43	43	14
19	---	29	25	108	417	316	181	220	692	38	51	13
20	---	26	26	104	432	427	243	181	691	38	47	13
21	---	23	25	96	356	451	266	149	567	41	42	13
22	---	51	e21	87	291	419	262	133	435	39	36	19
23	---	81	30	e74	245	366	239	115	350	45	30	29
24	---	77	34	324	349	e335	288	102	301	62	36	34
25	---	62	32	481	541	e317	292	91	261	60	31	31
26	---	53	43	508	550	302	272	84	232	52	37	25
27	---	54	51	415	457	282	250	76	203	44	36	22
28	---	50	51	303	366	261	224	66	175	37	36	19
29	---	46	e45	245	---	240	196	63	155	34	35	17
30	---	42	115	215	---	224	169	67	305	34	32	17
31	---	---	e137	193	---	203	---	61	---	39	29	---
TOTAL	---	---	1434	6032	7190	10492	6360	8407	10166	4265	897	568
MEAN	---	---	46.3	195	257	338	212	271	339	138	28.9	18.9
MAX	---	---	137	508	550	760	292	802	1050	601	51	34
MIN	---	---	21	74	106	166	139	61	53	34	14	13
CFSM	---	---	.70	2.96	3.91	5.15	3.23	4.13	5.16	2.09	.44	.29
IN.	---	---	.81	3.42	4.07	5.94	3.60	4.76	5.76	2.41	.51	.32

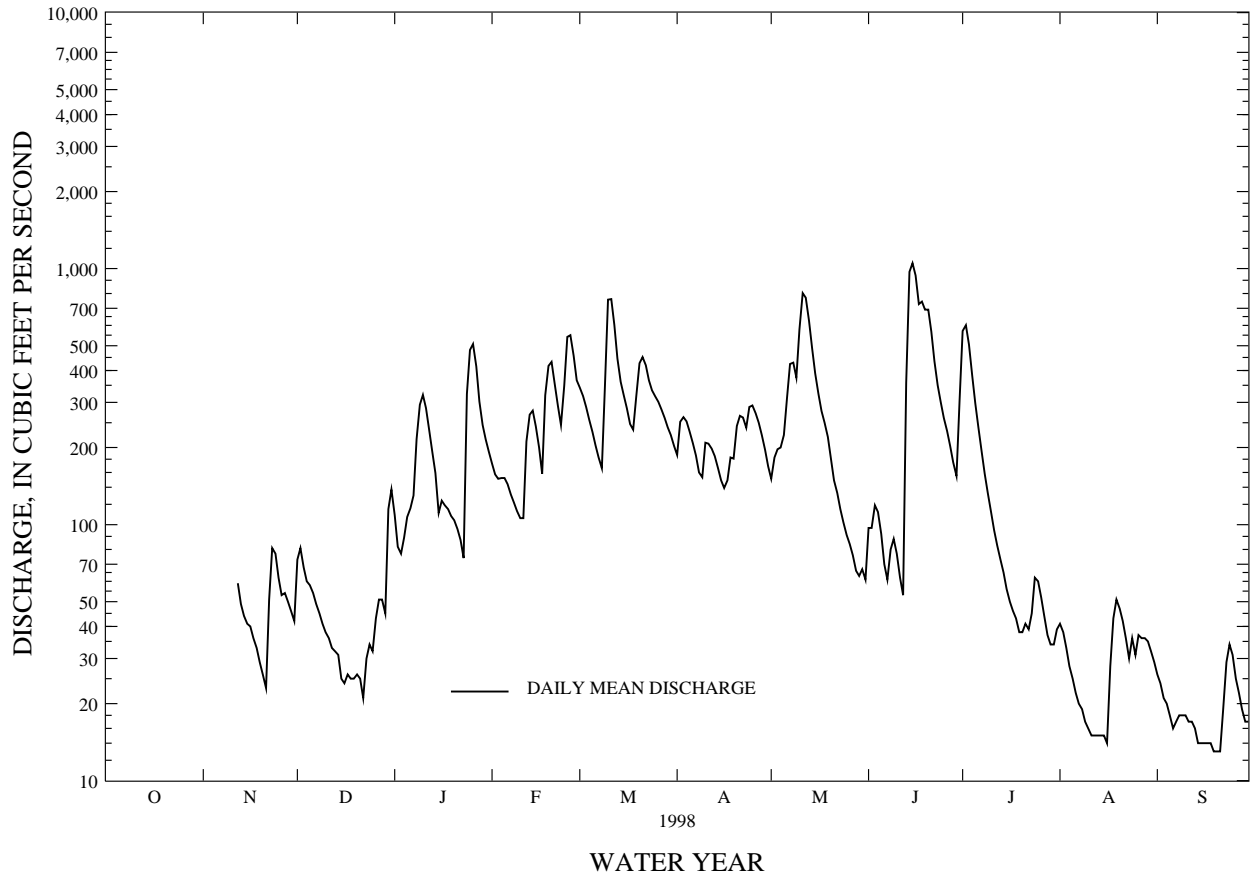
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

	1997	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MEAN	---	---	46.3	195	257	338	212	271	339	138	28.9	18.9
MAX	---	---	46.3	195	257	338	212	271	339	138	28.9	18.9
(WY)	---	---	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998
MIN	---	---	46.3	195	257	338	212	271	339	138	28.9	18.9
(WY)	---	---	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998

e Estimated

01103280 CHARLES RIVER AT MEDWAY, MA--Continued

CHARLES RIVER AT MEDWAY, MA 01103280



## CHARLES RIVER BASIN

01103500 CHARLES RIVER AT DOVER, MA

LOCATION.--Lat 42°15'22", long 71°15'38", Norfolk County, Hydrologic Unit 01090001, on right bank 0.3 mi downstream from highway bridge, 0.8 mi downstream from Noanet Brook, and 1.3 mi northeast of intersection of Centre and Walpole Streets in Dover.

DRAINAGE AREA.--183 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: October 1937 to current year. Prior to October 1977, published as "at Charles River Village."

Water-quality records: Water years 1975-95 (National stream-quality accounting network station).

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 89.76 ft above sea level.

REMARKS.--Records good. Flow affected by diversions to and from basin for municipal supplies. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--61 years, 307 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,220 ft<sup>3</sup>/s, Aug. 23, 1955, gage height, 9.24 ft and Mar. 22, 1968, gage height, 8.72 ft; minimum, 0.5 ft<sup>3</sup>/s, Oct. 24, 1952 (caused by unusual regulation); minimum daily, 0.9 ft<sup>3</sup>/s, Oct. 24, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since flood in 1886, that of August 1955 and March 1968. Flood in March 1936 reached a discharge of 3,170 ft<sup>3</sup>/s, by computation of flow over dam at site 0.2 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,070 ft<sup>3</sup>/s, June 18; gage height, 6.84 ft; minimum 11 ft<sup>3</sup>/s, Oct. 14, 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	64	160	209	629	1010	572	449	246	934	148	109
2	16	104	176	223	579	971	589	451	245	919	141	99
3	17	117	196	213	534	917	569	430	276	947	131	91
4	19	130	206	209	498	859	558	423	274	964	118	82
5	24	125	184	220	467	802	551	447	268	947	107	74
6	22	107	167	240	443	741	538	537	253	888	97	67
7	20	89	150	275	421	682	519	665	230	800	91	64
8	19	84	135	374	396	628	492	720	231	723	83	68
9	19	103	121	436	372	713	471	761	237	650	78	69
10	19	123	111	488	351	921	469	1050	238	581	73	67
11	15	140	104	519	335	947	456	1240	228	515	71	64
12	14	145	100	531	408	1070	447	1370	209	456	80	61
13	13	130	96	521	436	1140	438	1430	458	402	68	57
14	12	121	90	491	463	1140	423	1430	1170	349	65	55
15	12	111	83	447	482	1090	401	1360	1390	293	65	54
16	12	106	78	411	485	1000	377	1260	1720	246	68	56
17	12	103	73	374	470	917	363	1130	1870	212	104	53
18	12	97	69	365	601	827	352	993	1980	188	171	50
19	12	90	68	338	651	847	342	883	1960	169	205	49
20	13	84	67	312	697	898	405	774	1830	158	208	47
21	15	78	65	288	744	880	411	680	1730	157	193	45
22	17	109	61	268	758	917	438	596	1620	152	170	79
23	17	140	59	251	741	923	483	529	1490	159	145	109
24	19	174	62	426	818	904	577	471	1320	170	152	105
25	29	184	82	520	922	874	578	419	1150	177	141	105
26	36	174	89	607	934	843	571	374	1110	171	142	96
27	59	162	101	670	971	802	567	332	973	162	143	87
28	59	154	109	754	995	757	551	292	843	151	142	76
29	62	145	113	755	---	712	519	259	741	140	136	69
30	59	135	171	728	---	665	481	236	760	134	132	70
31	53	---	209	682	---	621	---	218	---	146	122	---
TOTAL	743	3628	3555	13145	16601	27018	14508	22209	27050	13060	3790	2177
MEAN	24.0	121	115	424	593	872	484	716	902	421	122	72.6
MAX	62	184	209	755	995	1140	589	1430	1980	964	208	109
MIN	12	64	59	209	335	621	342	218	209	134	65	45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1998, BY WATER YEAR (WY)

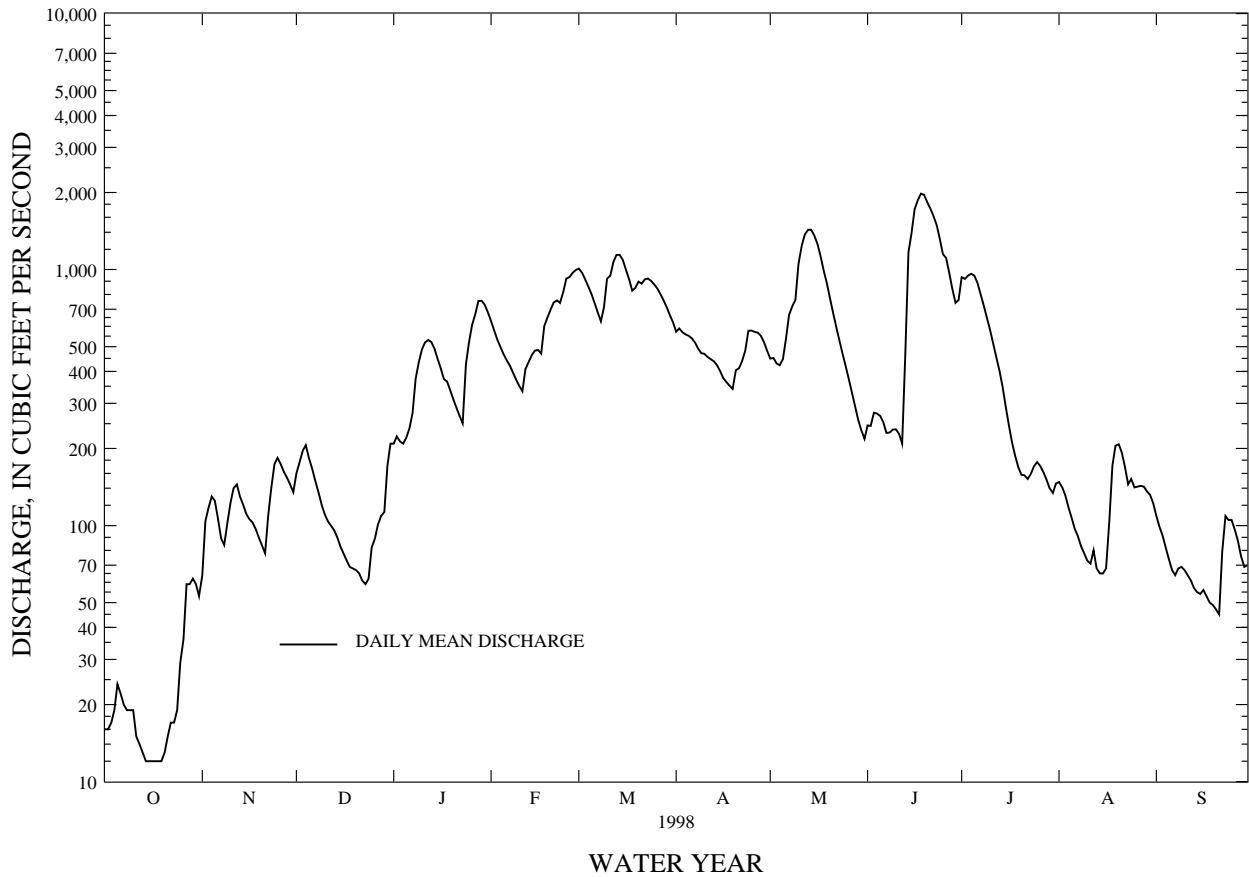
MEAN	141	250	346	370	431	618	588	363	239	128	115	99.4
MAX	600	892	866	1180	998	1172	1474	746	1129	1060	956	640
(WY)	1956	1956	1997	1979	1970	1983	1987	1954	1982	1938	1955	1954
MIN	13.4	33.1	54.6	45.3	86.7	227	169	138	67.2	19.5	9.01	7.78
(WY)	1958	1966	1966	1981	1980	1985	1966	1986	1957	1957	1957	1957

CHARLES RIVER BASIN

01103500 CHARLES RIVER AT DOVER, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1938 - 1998	
ANNUAL TOTAL	88556.8		147484			
ANNUAL MEAN	243		404		307	
HIGHEST ANNUAL MEAN					496 1984	
LOWEST ANNUAL MEAN					117 1966	
HIGHEST DAILY MEAN	1150 Apr 9		1980 Jun 18		3190 Mar 22 1968	
LOWEST DAILY MEAN	9.1 Aug 4		12 Oct 14		.90 Oct 24 1952	
ANNUAL SEVEN-DAY MINIMUM	10 Aug 2		12 Oct 13		4.3 Sep 10 1995	
INSTANTANEOUS PEAK FLOW			2070 Jun 18		3220 Aug 23 1955	
INSTANTANEOUS PEAK STAGE			6.84 Jun 18		9.24 Aug 23 1955	
INSTANTANEOUS LOW FLOW			11 Oct 14		.50 Oct 24 1952	
10 PERCENT EXCEEDS	562		939		690	
50 PERCENT EXCEEDS	124		245		211	
90 PERCENT EXCEEDS	16		58		42	

CHARLES RIVER AT DOVER, MA 01103500



## CHARLES RIVER BASIN

01104000 MOTHER BROOK AT DEDHAM, MA

LOCATION.--Lat 42°15'18", long 71°09'53", Norfolk County, Hydrologic Unit 01090001, on right bank 100 ft upstream from Washington Street Bridge at Dedham and 0.4 mi downstream from point of diversion from Charles River.

PERIOD OF RECORD.--Discharge: October 1931 to current year.  
Water-quality records: Water years 1959, 1969-70.

REVISED RECORDS.--WSP 1301: 1932(M).

GAGE.--Water-stage recorder. Concrete control since June 10, 1960. Datum of gage is 0.03 ft below sea level. Dec. 9, 1931, to June 9, 1960, nonrecording gage at site 200 ft upstream at same datum.

REMARKS.--Records good. Mother Brook is a diversion from Charles River to Neponset River through Dedham and Hyde Park.

AVERAGE DISCHARGE.--67 years, 76.9 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft<sup>3</sup>/s, Mar. 21, 1968, gage height, 87.18 ft; maximum gage height, 92.90 ft, Aug. 24, 1955, from graph based on gage readings; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 797 ft<sup>3</sup>/s, June 14, gage height, 86.19 ft; minimum, 0.41 ft<sup>3</sup>/s, Oct. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.56	8.3	25	18	132	248	101	109	11	262	17	14
2	.56	13	29	23	105	238	110	114	6.8	242	11	12
3	.95	8.5	22	32	86	219	101	103	15	218	10	9.7
4	.47	16	24	28	75	198	92	110	12	212	19	6.1
5	.94	18	24	26	68	176	90	165	10	207	17	4.3
6	.58	13	20	26	54	156	100	239	7.0	207	16	2.6
7	.62	9.3	14	42	42	133	142	284	5.1	227	13	2.4
8	.64	9.8	11	91	36	114	136	288	4.2	206	8.9	1.8
9	.59	15	8.3	112	28	154	129	286	3.8	186	5.8	1.6
10	19	14	6.5	118	24	244	150	389	2.9	156	4.8	3.2
11	21	12	5.5	118	21	241	174	466	2.0	125	12	2.8
12	15	12	3.7	112	47	247	169	480	1.1	97	26	1.8
13	12	10	2.7	109	62	272	161	464	148	72	15	1.5
14	5.6	10	2.5	106	58	283	150	453	454	45	9.8	1.5
15	1.3	7.7	1.7	89	59	279	140	432	463	26	7.1	1.7
16	1.2	4.8	1.1	90	55	251	127	403	493	16	5.6	1.5
17	1.1	3.5	.81	75	51	223	120	371	517	21	24	3.5
18	1.1	2.4	.63	60	129	192	121	329	518	15	35	4.4
19	1.0	2.6	.56	47	159	201	103	274	506	8.8	40	3.2
20	1.2	4.6	.56	36	146	223	132	227	521	8.0	41	2.2
21	.88	12	.53	27	154	211	130	188	481	23	44	1.6
22	1.0	34	.57	22	157	219	123	157	441	23	35	12
23	.96	40	.74	20	152	219	146	123	407	26	22	17
24	1.3	46	.86	111	213	217	206	97	374	38	23	5.3
25	2.7	49	1.7	141	283	205	194	72	318	32	23	2.7
26	.68	42	1.6	136	260	190	177	53	290	27	22	1.6
27	2.2	42	1.1	147	235	179	171	37	254	23	19	1.0
28	.93	24	1.2	161	232	162	160	23	200	29	13	.82
29	.83	18	1.9	172	---	148	144	14	156	27	11	.75
30	1.9	14	12	163	---	130	126	9.1	167	23	8.1	.64
31	1.8	---	18	152	---	115	---	4.4	---	22	7.7	---
TOTAL	100.59	515.5	243.76	2610	3123	6287	4125	6763.5	6788.9	2849.8	565.8	125.21
MEAN	3.24	17.2	7.86	84.2	112	203	138	218	226	91.9	18.3	4.17
MAX	21	49	29	172	283	283	206	480	521	262	44	17
MIN	.47	2.4	.53	18	21	114	90	4.4	1.1	8.0	4.8	.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1998, BY WATER YEAR (WY)

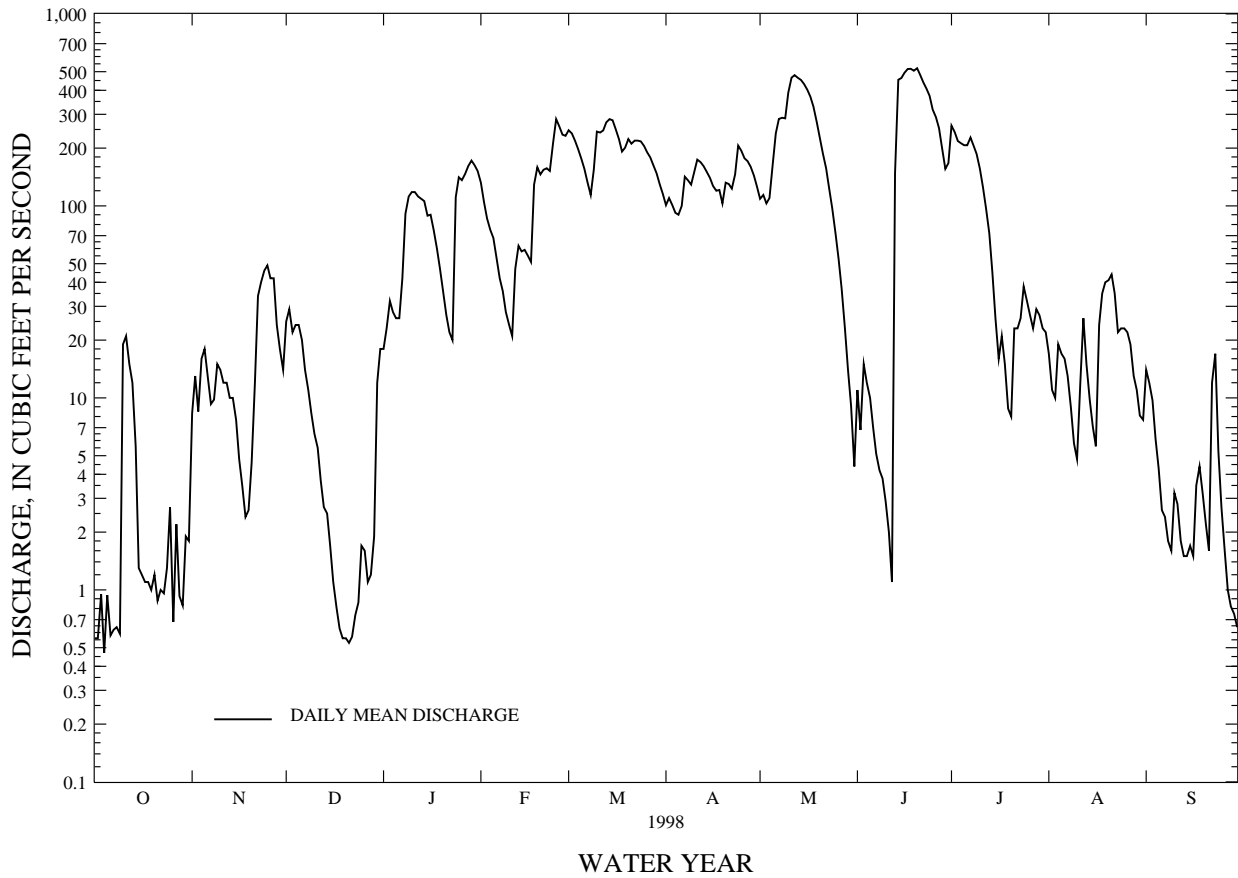
MEAN	27.4	56.3	85.9	97.2	113	176	161	90.3	55.0	22.7	21.7	19.9
MAX	182	308	285	287	360	490	437	253	328	339	306	189
(WY)	1956	1956	1973	1976	1970	1936	1987	1954	1982	1938	1955	1954
MIN	.000	.61	.43	.14	.14	.54	26.5	.000	.000	.061	.000	.097
(WY)	1942	1959	1959	1959	1959	1959	1966	1960	1955	1957	1949	1943

CHARLES RIVER BASIN

01104000 MOTHER BROOK AT DEDHAM, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1932 - 1998	
ANNUAL TOTAL	25736.70	34098.06	76.9	1938
ANNUAL MEAN	70.5	93.4	149	1960
HIGHEST ANNUAL MEAN			20.6	1968
LOWEST ANNUAL MEAN			1010	1941
HIGHEST DAILY MEAN	401 Apr 8	521 Jun 20	.00	1941
LOWEST DAILY MEAN	.45 Sep 10	.47 Oct 4	.00	1941
ANNUAL SEVEN-DAY MINIMUM	.50 Sep 5	.63 Dec 17	1040	1968
INSTANTANEOUS PEAK FLOW		797 Jun 14	92.90	1955
INSTANTANEOUS PEAK STAGE		86.19 Jun 14	.00	1941
INSTANTANEOUS LOW FLOW		.41 Oct 4		
10 PERCENT EXCEEDS	246	245	204	
50 PERCENT EXCEEDS	15	29	39	
90 PERCENT EXCEEDS	.61	1.3	1.5	

MOTHER BROOK AT DEDHAM, MA 01104000



## CHARLES RIVER BASIN

01104200 CHARLES RIVER AT WELLESLEY, MA

LOCATION.--Lat 42°18'59", long 71°13'42", Norfolk County, Hydrologic Unit 01090001, on left bank at east limits of Wellesley, 30 ft upstream from a horseshoe-shaped dam and 50 ft upstream from bridge on State Highway 9.

DRAINAGE AREA.--211 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: August 1959 to current year.  
Water-quality records: Water year 1968.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 67.92 ft above sea level.

REMARKS.--Records good. Flow affected by diversion to Mother Brook (station 01104000), and by diversions to and from basin for municipal supplies. Occasional regulation at dam 0.2 mi upstream and by other ponds upstream.

AVERAGE DISCHARGE.--39 years, 288 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,410 ft<sup>3</sup>/s, Mar. 21, 1968, gage height, 6.20 ft; no flow Sept. 15, Oct. 6, 1959 (caused by closing of gates at dam at gage); minimum daily, 1.0 ft<sup>3</sup>/s, Aug. 24, 31, Sept. 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,930 ft<sup>3</sup>/s, June 18, gage height, 5.53 ft; minimum daily, 7.2 ft<sup>3</sup>/s, Oct. 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	104	225	272	654	965	643	483	340	1050	175	112
2	24	191	226	254	615	948	678	505	317	1010	169	120
3	27	125	248	247	587	911	647	482	354	960	116	124
4	31	128	274	251	558	869	626	390	344	946	113	111
5	36	138	265	263	528	825	609	407	335	933	106	99
6	24	129	241	282	509	782	496	558	323	799	102	94
7	15	116	218	325	488	739	483	646	311	753	102	95
8	e11	121	201	442	464	696	489	669	313	703	100	97
9	e10	166	184	498	446	820	481	676	306	658	96	63
10	e9.0	179	168	525	427	980	402	948	300	610	68	66
11	9.2	172	157	532	413	942	390	1160	290	559	82	84
12	7.5	186	152	539	522	949	395	1230	272	512	124	82
13	8.5	179	146	539	542	991	391	1220	760	466	89	78
14	8.1	177	134	516	529	1010	389	1200	1460	423	84	72
15	7.2	179	134	482	537	995	380	1180	1450	377	85	75
16	7.6	159	125	437	541	962	373	1120	1510	277	88	51
17	10	152	118	424	534	911	375	1050	1570	252	158	44
18	13	143	110	411	737	851	371	949	1680	234	214	59
19	12	135	106	394	785	879	357	860	1730	216	232	61
20	12	76	101	378	754	905	425	781	1660	139	195	61
21	13	77	98	359	755	874	431	699	1570	147	192	61
22	14	148	94	340	766	879	428	630	1480	159	186	129
23	18	173	105	327	760	888	474	576	1400	150	174	198
24	18	187	108	598	889	885	600	525	1280	166	169	155
25	32	208	130	650	998	867	585	483	1150	174	157	144
26	47	211	158	651	950	844	573	443	1090	179	176	137
27	83	190	162	662	943	814	560	408	1030	142	182	122
28	81	199	169	700	943	784	551	370	932	139	181	112
29	57	190	171	721	---	745	535	340	840	151	176	98
30	57	186	284	717	---	713	508	316	891	153	168	92
31	68	---	294	692	---	678	---	290	---	173	115	---
TOTAL	793.1	4724	5306	14428	18174	26901	14645	21594	27288	13610	4374	2896
MEAN	25.6	157	171	465	649	868	488	697	910	439	141	96.5
MAX	83	211	294	721	998	1010	678	1230	1730	1050	232	198
MIN	7.2	76	94	247	413	678	357	290	272	139	68	44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1998, BY WATER YEAR (WY)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	150	244	334	345	402	550	548	344	240	116	103	91.1																												
MAX	495	561	805	1018	766	1048	1223	697	951	439	430	253																												
(WY)	1997	1990	1997	1979	1970	1983	1987	1998	1982	1998	1990	1961																												
MIN	23.2	34.0	52.6	43.8	95.7	211	154	124	67.3	24.5	13.0	14.9																												
(WY)	1966	1966	1966	1981	1980	1985	1985	1986	1964	1997	1965	1965																												

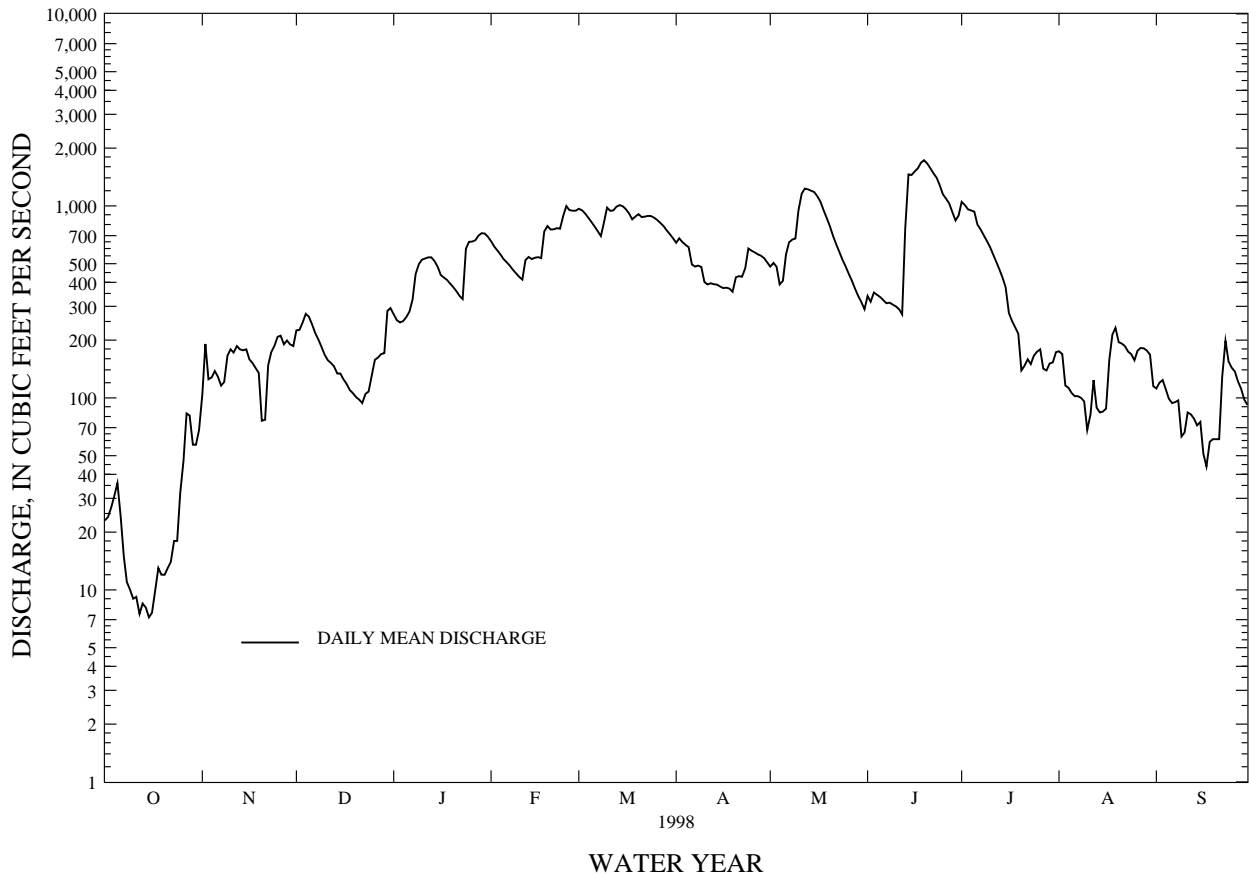
CHARLES RIVER BASIN

01104200 CHARLES RIVER AT WELLESLEY, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1959 - 1998	
ANNUAL TOTAL	79310.1		154733.1			
ANNUAL MEAN	217		424		288	
HIGHEST ANNUAL MEAN					458	
LOWEST ANNUAL MEAN					108	
HIGHEST DAILY MEAN					2330	
LOWEST DAILY MEAN	809	Apr 9	1730	Jun 19	Mar 22 1968	
ANNUAL SEVEN-DAY MINIMUM	7.2	Oct 15	7.2	Oct 15	Aug 24 1965	
INSTANTANEOUS PEAK FLOW	8.2	Oct 10	8.2	Oct 10	Aug 20 1965	
INSTANTANEOUS PEAK STAGE			1930	Jun 18	2410	
INSTANTANEOUS LOW FLOW			5.53	Jun 18	6.20	
10 PERCENT EXCEEDS	517		6.3	Oct 12	.00	
50 PERCENT EXCEEDS	159		947		632	
90 PERCENT EXCEEDS	20		316		209	
			67		44	

e Estimated

CHARLES RIVER AT WELLESLEY, MA 01104200





## CHARLES RIVER BASIN

01104390 STONY BROOK AT KENDAL GREEN, MA

LOCATION.--Lat 42°22'36", Long 71°16'55", Middlesex County, Hydrologic Unit 01090001, at bridge on road to Weston Recycling Center, 20 ft upstream from Hobbs Brook, and 0.2 mi south of Kendal Green.

DRAINAGE AREA.--10.4 mi<sup>2</sup>

PERIOD OF RECORD.--March 1997 to September 1998.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
21...	1515	--	--	--	--	--	--	--	--	20
22...	1515	--	280	6.4	--	9.8	--	8.8	--	--
NOV										
19...	1300	4.3	188	6.8	--	2.1	762	13.1	95	--
21...	1405	4.4	222	6.5	--	3.4	772	--	--	16
22...	1515	--	207	6.5	--	3.0	--	11.6	--	14
DEC										
17...	0900	4.0	233	6.5	-1.0	.6	754	--	--	18
17...	1015	4.0	225	6.5	--	.7	756	13.5	95	--
JAN										
14...	1000	--	158	7.8	--	.0	770	13.6	92	13
24...	1440	42	174	6.7	.5	.5	743	--	--	10
FEB										
13...	1035	47	151	7.0	7.5	2.2	752	--	--	11
MAR										
18...	1000	--	159	6.6	4.8	2.9	772	12.0	88	12
24...	1140	49	148	6.9	--	3.5	760	--	--	11
APR										
14...	1115	20	127	7.0	17.1	9.9	757	--	--	13
MAY										
13...	1015	--	112	6.6	13.9	10.9	767	9.6	87	--
19...	1225	42	159	7.2	24.3	16.9	752	--	--	12
JUN										
04...	1730	18	178	6.2	17.8	15.5	747	--	--	13
JUL										
08...	1015	--	155	6.7	--	18.4	759	7.9	85	13
29...	1245	5.8	198	7.1	30.6	21.0	750	--	--	15
AUG										
12...	0900	5.4	184	6.3	20.5	18.8	758	7.0	75	--
SEP										
17...	1120	2.0	232	6.5	18.2	15.3	761	8.7	87	16

CHARLES RIVER BASIN

01104390 STONY BROOK AT KENDAL GREEN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
21...	4.8	25	2.5	--	14	45	<0.10	13	165	<0.010
22...	--	--	--	40	--	--	--	--	--	--
NOV										
19...	--	--	--	30	18	--	--	--	--	<0.010
21...	--	16	--	--	--	31	--	--	--	--
22...	3.2	20	2.0	--	21	36	<.10	9.1	143	<.010
DEC										
17...	--	18	--	--	--	33	--	--	--	--
17...	--	--	--	--	21	--	--	--	--	<.010
JAN										
14...	2.8	13	1.4	14	18	24	<.10	9.6	105	<.010
24...	2.3	18	1.4	--	13	31	<.10	8.2	113	.011
FEB										
13...	--	13	--	--	--	22	--	--	--	--
MAR										
18...	2.5	14	1.3	--	13	26	<.10	7.2	101	<.010
24...	--	14	--	--	--	23	--	--	--	--
APR										
14...	--	16	--	--	--	33	--	--	--	.016
MAY										
13...	--	--	--	--	8.8	--	--	--	--	.012
19...	--	14	--	--	--	22	--	--	--	--
JUN										
04...	--	14	--	--	--	26	--	--	--	--
JUL										
08...	2.6	14	1.4	--	7.4	23	<.10	10	112	.012
29...	--	18	--	--	--	31	--	--	--	--
AUG										
12...	--	--	--	--	9.5	--	--	--	--	.014
SEP										
17...	3.6	21	2.0	--	12	36	<.10	13	141	.010

## CHARLES RIVER BASIN

01104390 STONY BROOK AT KENDAL GREEN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
21...	1.11	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	220	492	2.8
22...	--	--	--	--	--	--	--	--	--	--
NOV										
19...	.557	<.020	.36	.27	.011	<.010	.016	180	108	5.9
21...	--	--	--	--	--	--	--	--	--	--
22...	.462	<.020	.31	.29	<.010	<.010	.018	160	59	--
DEC										
17...	--	--	--	--	--	--	--	--	--	--
17...	1.03	<.020	.27	.27	<.010	<.010	<.010	92	184	--
JAN										
14...	.684	<.020	.32	.26	<.010	<.010	.010	150	29	--
24...	.498	<.020	.31	.33	<.010	<.010	.019	120	52	--
FEB										
13...	--	--	--	--	--	--	--	--	--	--
MAR										
18...	.582	.035	.25	.23	<.010	<.010	<.001	100	45	5.0
24...	--	--	--	--	--	--	--	--	--	--
APR										
14...	.441	.045	.57	.38	.016	.011	.003	--	--	--
MAY										
13...	.266	.029	.38	.38	<.010	<.010	<.001	230	24	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
JUL										
08...	.340	.058	.51	.42	.024	.019	.013	670	183	--
29...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	.614	.108	.33	.29	.022	.010	.009	250	240	--
SEP										
17...	.767	.028	.27	.23	.017	.195	.006	190	381	--



Typical complement of streamgaging equipment carried in USGS field vehicles  
(photo by R. S. Socolow).





CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

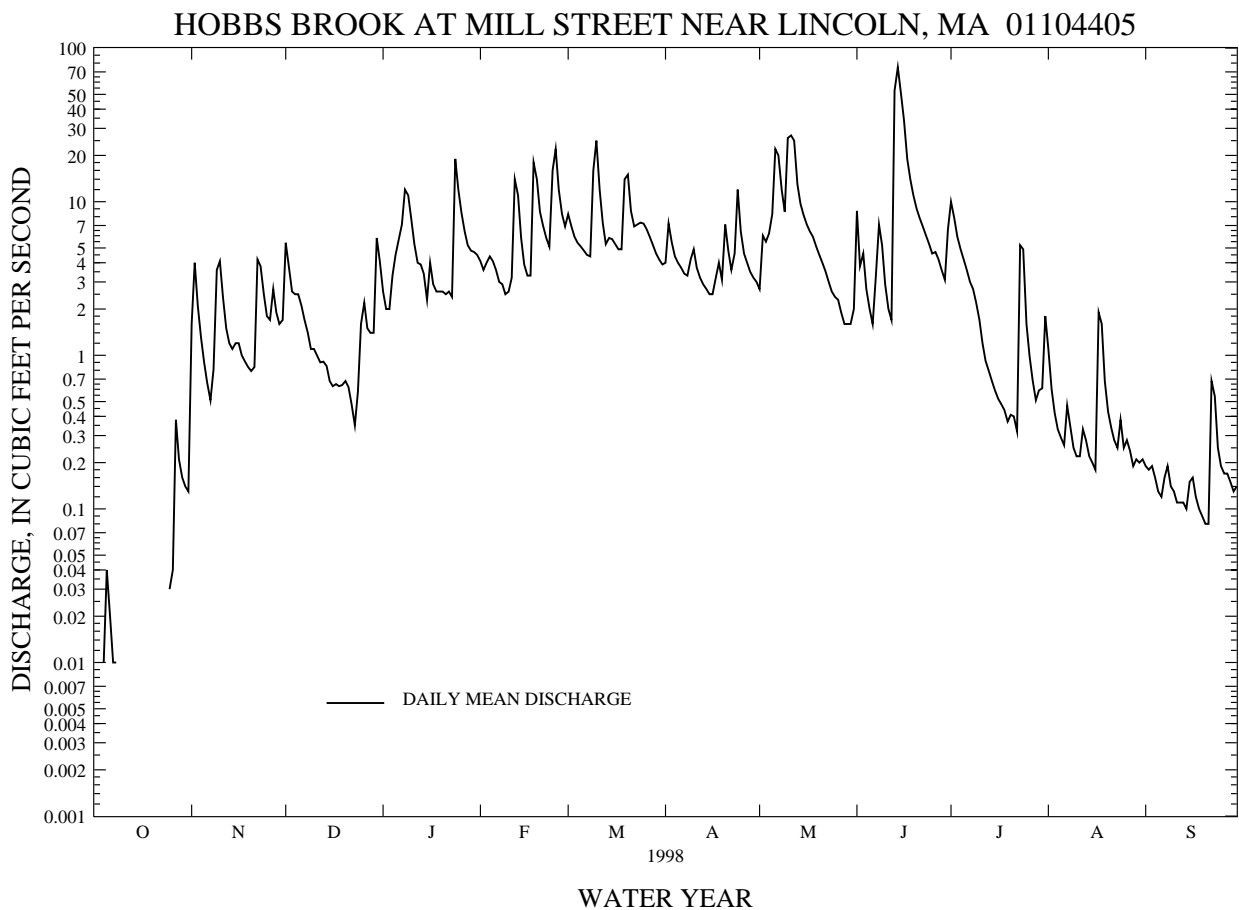
SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1997 - 1998

ANNUAL TOTAL	1546.11		
ANNUAL MEAN	4.24		4.24
HIGHEST ANNUAL MEAN			4.24 1998
LOWEST ANNUAL MEAN			4.24 1998
HIGHEST DAILY MEAN	75	Jun 14	75 Jun 14 1998
LOWEST DAILY MEAN	.00	Oct 1	.00 Sep 6 1997
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 9	.00 Oct 9 1997
INSTANTANEOUS PEAK FLOW	158	Jun 14	158 Jun 14 1998
INSTANTANEOUS PEAK STAGE	3.92	Jun 14	3.92 Jun 14 1998
INSTANTANEOUS LOW FLOW	.00	Oct 1	.00 Oct 1 1997
ANNUAL RUNOFF (CFSM)	1.96		1.96
ANNUAL RUNOFF (INCHES)	26.63		26.65
10 PERCENT EXCEEDS	8.6		8.5
50 PERCENT EXCEEDS	2.6		2.3
90 PERCENT EXCEEDS	.13		.01

e Estimated



CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to September 1998.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1997 to September 1998.  
 WATER TEMPERATURE: September 1997 to September 1998.  
 CALCIUM CONCENTRATION: October 1997 to September 1998.  
 CALCIUM LOAD: October 1997 to September 1998.  
 SODIUM CONCENTRATION: October 1997 to September 1998.  
 SODIUM LOAD: October 1997 to September 1998.  
 CHLORIDE CONCENTRATION: October 1997 to September 1998.  
 CHLORIDE LOAD: October 1997 to September 1998.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

REMARKS.--Records good, except those for estimated daily specific conductances, which are poor. Calcium, sodium, and chloride concentrations and loads records are good, except those for which have estimated daily discharge and/or specific conductance.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 4,360 µS/cm, Jan. 23; minimum, 39 µS/cm, June 14.  
 WATER TEMPERATURE: Maximum recorded, 22.7°C, Aug. 16; minimum, -0.4°C, Jan. 23.  
 CALCIUM CONCENTRATION: Maximum daily mean, 29 mg/L, Nov. 15 and Mar. 22; minimum daily mean, 4.9 mg/L, June 14.  
 CALCIUM LOAD: Maximum daily, 1.01 tons, Jan. 24; minimum daily, 0.0 tons, many days.  
 SODIUM CONCENTRATION: Maximum daily mean, 213 mg/L, Nov. 15; minimum daily mean, 3.7 mg/L, June 14.  
 SODIUM LOAD: Maximum daily, 4.81 tons, Jan. 24; minimum daily, 0.0 tons, many days.  
 CHLORIDE CONCENTRATION: Maximum daily mean, 380 mg/L, Nov. 15; minimum daily mean, 6.5 mg/L, June 14.  
 CHLORIDE LOAD: Maximum daily, 8.54 tons, Jan. 24; minimum daily, 0.0 tons, many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 OF (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT- SATUR- ATION (00301)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
27...	1045	0.55	1050	6.5	--	7.6	745	9.2	79	--
NOV										
18...	0930	.85	393	5.8	--	1.8	766	11.3	81	--
20...	1025	.73	368	6.7	--	2.6	768	--	--	19
22...	0845	4.9	440	5.9	--	3.4	--	10.6	--	19
DEC										
15...	1145	.62	316	6.4	1.0	.5	757	--	--	18
16...	0900	.59	294	6.3	--	-.1	761	12.0	82	--
JAN										
13...	0930	3.7	233	6.1	--	1.1	760	15.0	106	13
16...	1115	4.6	303	6.3	--	.0	757	11.6	80	14
16...	1320	4.6	659	6.5	--	.0	756	12.0	83	21
16...	1430	4.6	798	6.4	--	.0	756	11.9	82	23
24...	1305	19	478	6.1	1.2	-.2	747	--	--	14
FEB										
12...	1350	18	277	6.4	15.0	1.5	737	--	--	9.9
MAR										
17...	0920	4.7	222	6.3	3.4	.5	773	12.2	83	10
22...	1230	6.6	2240	6.3	.0	.1	741	--	--	35
22...	1500	6.8	1090	6.3	.5	.5	741	--	--	21
APR										
13...	0900	3.1	251	6.3	15.5	5.2	763	--	--	11
MAY										
12...	0900	26	134	6.0	10.2	9.4	760	8.9	78	--
18...	0950	5.9	192	7.1	23.1	12.9	752	--	--	9.4
JUN										
04...	1135	2.8	207	6.1	15.1	12.2	745	--	--	11
JUL										
07...	1000	3.0	194	6.8	22.6	16.4	760	8.1	83	12
28...	0830	.53	215	7.1	22.5	17.8	752	--	--	13
AUG										
11...	0920	.24	240	6.7	--	19.6	751	6.6	73	--
SEP										
16...	0930	.17	226	6.5	22.5	18.3	757	6.1	65	15



## CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
27...	--	--	--	--	--	--	--	--	--	0.016
NOV										
18...	--	--	--	11	39	--	--	--	--	<.010
20...	--	40	--	--	--	76	--	--	--	--
22...	3.2	68	1.4	--	30	120	0.10	9.3	300	<.010
DEC										
15...	--	33	--	--	--	60	--	--	--	--
16...	--	--	--	--	28	--	--	--	--	<.010
JAN										
13...	2.6	30	.93	8.4	18	54	<.10	10	162	<.010
16...	2.8	37	.96	--	18	70	<.10	10	185	<.010
16...	3.7	118	1.5	--	20	200	<.10	11	413	<.010
16...	3.8	122	1.5	--	20	210	<.10	11	437	<.010
24...	2.4	74	1.1	--	11	130	<.10	6.4	277	.013
FEB										
12...	--	40	--	--	--	68	--	--	--	--
MAR										
17...	2.1	28	.91	--	12	46	<.10	9.0	135	<.010
22...	4.5	382	2.2	--	20	680	<.10	7.2	1180	<.010
22...	3.0	178	1.6	--	15	320	<.10	7.5	588	<.010
APR										
13...	--	32	--	--	--	59	--	--	--	.014
MAY										
12...	--	--	--	--	6.8	--	--	--	--	<.010
18...	--	23	--	--	--	37	--	--	--	--
JUN										
04...	--	25	--	--	--	41	--	--	--	--
JUL										
07...	2.4	23	1.1	--	7.1	37	<.10	13	144	.014
28...	--	23	--	--	--	40	--	--	--	--
AUG										
11...	--	--	--	--	11	--	--	--	--	.013
SEP										
16...	2.9	23	1.5	--	12	40	<.10	11	134	.015

CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
27...	<0.050	<0.015	0.50	0.24	0.019	<0.010	<0.010	--	--	8.5
NOV										
18...	.111	<.020	.54	.44	<.010	<.010	.020	310	91	12
20...	--	--	--	--	--	--	--	--	--	--
22...	.194	<.020	.67	.44	.028	<.010	.019	280	97	--
DEC										
15...	--	--	--	--	--	--	--	--	--	--
16...	.181	<.020	.40	.41	.015	<.010	<.010	260	51	--
JAN										
13...	.312	<.020	.41	.34	<.010	<.010	.014	230	41	--
16...	.322	<.020	.36	.29	.025	<.010	.014	180	40	--
16...	.319	<.020	.32	.29	<.010	<.010	.010	170	42	--
16...	.321	<.020	.30	.31	.030	<.010	.012	170	46	--
24...	.230	<.020	.52	.32	.026	<.010	.016	180	86	--
FEB										
12...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	.124	.044	.33	.19	<.010	<.010	.003	160	17	7.6
22...	.158	.060	.38	.31	<.010	<.010	<.010	150	33	--
22...	.160	.041	.36	.31	<.010	<.010	<.010	150	31	--
APR										
13...	.117	.036	.52	.47	.020	.018	.008	--	--	--
MAY										
12...	<.050	<.020	.65	.67	.024	.011	.010	490	19	--
18...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
JUL										
07...	.172	.083	.87	.69	.045	.041	.022	1200	80	--
28...	--	--	--	--	--	--	--	--	--	--
AUG										
11...	.372	.086	.27	.29	<.010	.014	.011	82	7.3	--
SEP										
16...	.491	<.020	.34	.17	.042	.119	.004	160	29	--

SPECIFIC CONDUCTANCE (µS/CM AT 25°C),  
SEPTEMBER 1997

TEMPERATURE, WATER (DEG. C), SEPTEMBER 1997

DAY	MAX	MIN	MEAN	DAY	MAX	MIN	MEAN
SEPTEMBER				SEPTEMBER			
12	294	119	220	12	---	---	---
13	306	291	295	13	21.5	16.7	18.5
14	298	287	291	14	21.2	17.0	18.4
15	292	280	285	15	20.0	15.8	17.6
16	289	279	282	16	19.3	15.4	17.1
17	287	280	284	17	17.6	12.8	15.6
18	285	271	278	18	20.0	16.3	17.7
19	---	---	---	19	---	---	---
20	e234	e147	e203	20	---	---	---
21	245	149	208	21	17.0	10.9	14.1
22	267	244	254	22	14.7	7.9	11.1
23	280	267	275	23	14.6	11.4	12.8
24	281	267	275	24	12.7	8.9	10.8
25	---	---	---	25	---	---	---
26	---	---	---	26	---	---	---
27	---	---	---	27	---	---	---
28	---	---	---	28	---	---	---
29	---	---	---	29	---	---	---
30	288	267	282	30	16.1	12.3	13.9
31	---	---	---	31	---	---	---
MONTH	---	---	---	MONTH	---	---	---

e Estimated

## CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

SPECIFIC CONDUCTANCE ( $\mu\text{S}/\text{CM}$ AT $25^\circ\text{C}$ ), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	400	219	374	360	267	297	253	237	245
2	---	---	---	386	273	366	278	255	268	259	241	247
3	---	---	---	367	358	363	290	259	276	282	259	272
4	264	234	251	368	359	363	575	285	358	289	282	286
5	284	183	229	365	358	361	348	293	307	294	271	279
6	249	194	218	366	341	353	298	286	295	281	255	266
7	260	248	254	344	337	341	296	274	288	255	219	237
8	266	251	259	349	323	332	295	281	291	226	191	202
9	278	266	272	335	245	298	294	249	277	213	200	207
10	288	277	283	286	276	280	302	274	290	225	197	213
11	286	275	280	300	282	291	301	257	288	243	218	231
12	---	---	---	311	300	306	300	256	284	238	205	223
13	---	---	---	314	308	312	301	267	290	368	223	268
14	---	---	---	313	252	285	296	253	278	244	217	229
15	---	---	---	2190	261	1180	291	255	270	238	226	233
16	---	---	---	984	559	679	272	249	258	715	221	383
17	---	---	---	559	438	492	273	247	258	377	240	263
18	---	---	---	438	390	413	277	239	256	1580	235	621
19	---	---	---	396	347	370	289	245	271	1060	305	412
20	---	---	---	379	355	368	289	256	276	856	293	426
21	---	---	---	379	351	364	276	245	260	329	273	299
22	---	---	---	929	348	428	296	260	274	274	251	263
23	---	---	---	378	316	340	260	233	245	4360	251	895
24	---	---	---	327	318	323	520	243	430	3120	352	659
25	e306	e254	e263	325	279	312	716	338	488	1020	290	398
26	289	228	256	322	313	319	680	395	458	304	253	282
27	292	191	247	455	311	351	412	331	361	273	249	261
28	402	292	371	314	297	307	404	284	324	297	273	286
29	414	396	403	309	305	308	306	249	286	311	283	295
30	414	396	405	361	279	304	689	249	334	341	286	301
31	419	395	406	---	---	---	288	243	269	315	286	305
MONTH	---	---	---	2190	219	383	716	233	303	4360	191	322
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	314	264	290	260	236	243	550	255	289	240	232	237
2	327	268	298	242	234	238	375	244	278	260	216	240
3	331	316	323	249	242	246	252	241	247	244	212	229
4	334	311	325	253	238	245	250	247	248	243	220	229
5	1180	302	495	251	243	248	255	248	251	231	207	223
6	1080	315	416	253	240	248	253	246	249	211	146	170
7	346	301	323	253	243	248	258	247	253	160	147	155
8	343	284	314	263	242	250	283	243	251	182	159	170
9	332	279	304	259	148	208	287	250	268	190	182	184
10	334	278	308	173	149	161	278	254	268	188	129	147
11	328	311	317	186	163	175	259	247	254	139	121	132
12	786	225	337	205	164	184	260	245	251	142	127	134
13	242	221	231	223	175	200	259	246	252	162	142	152
14	270	209	238	227	192	210	261	247	253	176	159	167
15	276	243	264	219	197	211	256	248	251	186	170	178
16	293	271	283	220	193	211	255	246	251	189	181	185
17	310	277	292	221	183	207	287	249	256	197	185	189
18	1950	201	434	251	207	217	278	254	267	197	188	192
19	228	201	215	252	174	205	254	244	247	198	191	195
20	258	219	240	180	174	177	274	217	249	201	192	197
21	258	247	253	658	180	267	244	229	236	207	199	202
22	265	248	257	1510	658	1050	247	232	239	205	197	202
23	287	251	267	751	293	409	241	197	230	210	200	205
24	374	210	266	304	260	280	220	198	206	212	206	209
25	217	208	211	276	245	258	217	199	209	213	208	211
26	229	210	217	264	245	255	223	214	218	219	209	212
27	241	229	235	265	249	257	231	219	224	217	210	214
28	249	235	242	271	256	264	229	222	225	219	214	217
29	---	---	---	274	264	269	237	222	229	289	216	223
30	---	---	---	274	259	267	241	228	235	293	224	235
31	---	---	---	275	268	272	---	---	---	257	194	225
MONTH	1950	201	293	1510	148	264	550	197	246	293	121	195

e Estimated

CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	208	169	191	137	125	132	194	187	190	278	261	274
2	196	188	192	136	131	133	202	193	196	273	251	265
3	214	184	200	144	135	140	208	197	204	273	234	260
4	201	193	197	e151	e144	e147	213	204	209	270	257	265
5	208	195	200	e154	e151	e152	217	205	210	266	250	256
6	217	203	211	e160	e153	e156	244	205	221	255	245	252
7	227	156	207	e162	e159	e161	272	202	244	268	240	250
8	201	188	193	164	162	163	252	246	248	268	208	244
9	204	195	199	e163	e160	e162	255	243	251	255	246	251
10	204	193	198	164	161	163	255	241	248	253	246	250
11	211	203	207	e168	e163	e165	246	211	240	252	244	248
12	224	208	212	172	166	169	269	198	238	252	246	250
13	222	43	133	173	170	172	253	245	251	255	246	251
14	56	39	46	177	171	174	254	243	250	254	246	250
15	84	56	73	181	176	179	248	240	244	257	227	249
16	97	83	89	182	178	180	245	233	240	262	208	242
17	115	97	107	184	181	183	247	140	220	261	250	256
18	124	115	120	186	182	184	240	230	235	261	254	259
19	137	124	130	184	177	181	253	238	246	262	254	259
20	139	133	137	201	178	187	267	253	260	264	255	261
21	145	139	141	194	184	189	275	267	272	266	254	258
22	150	144	146	194	186	190	277	269	274	318	118	247
23	150	147	148	192	144	178	277	268	273	310	269	284
24	e152	e149	e150	167	159	162	304	222	267	311	289	302
25	e157	e151	e154	167	160	164	282	272	277	318	305	312
26	e182	e148	e156	175	167	170	285	258	271	322	314	317
27	e164	e149	e155	186	175	180	282	266	275	340	310	316
28	e157	e152	e154	190	180	187	282	271	276	314	303	310
29	e156	e152	e154	205	189	194	279	263	269	313	295	301
30	e166	e129	e150	202	191	197	278	272	275	296	289	293
31	---	---	---	197	183	192	292	252	265	---	---	---
MONTH	227	39	158	205	125	171	304	140	246	340	118	268

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.2	7.0	9.2	3.2	1.2	2.7	-0.1	-0.2	-0.2
2	---	---	---	13.1	11.0	12.0	2.2	.5	1.3	.6	-.2	.1
3	---	---	---	12.2	9.6	10.7	2.9	.6	1.8	2.3	.6	1.4
4	13.8	9.4	11.4	10.8	8.2	9.5	4.5	2.1	3.3	2.8	1.4	2.0
5	15.8	12.1	13.2	9.4	6.8	8.2	4.2	3.1	3.7	2.6	1.3	1.8
6	18.1	11.1	13.8	7.7	4.9	6.5	3.1	1.4	2.3	3.2	1.6	2.2
7	14.8	10.8	12.7	8.2	5.9	7.2	3.1	.7	1.9	2.1	1.1	1.7
8	11.6	7.4	9.8	8.1	7.7	8.0	2.7	1.0	1.9	1.4	.8	1.1
9	14.0	10.1	12.0	8.3	8.1	8.2	1.9	-.2	.9	1.9	1.2	1.5
10	16.8	13.4	14.7	9.2	8.0	8.5	2.3	.5	1.5	2.4	.5	1.4
11	---	---	---	8.4	5.5	7.6	2.2	-.2	1.1	2.4	.4	1.2
12	---	---	---	5.5	3.4	4.5	2.3	-.2	1.1	.8	-.3	.2
13	---	---	---	4.1	2.3	3.3	2.2	.2	1.3	2.5	-.1	1.3
14	---	---	---	3.0	-.2	.9	1.6	-.3	.6	.6	-.3	.0
15	---	---	---	2.5	-.2	1.1	.2	-.2	-.1	.1	-.2	-.1
16	---	---	---	3.4	1.7	2.5	.2	-.2	-.1	-.2	-.2	-.2
17	---	---	---	3.1	.3	1.8	.9	-.2	.3	.0	-.2	-.1
18	---	---	---	4.1	1.1	2.5	.8	-.2	.2	.2	-.1	.0
19	---	---	---	2.8	.5	1.8	2.2	-.2	.9	.8	-.1	.4
20	---	---	---	3.2	.8	2.0	2.4	.2	1.3	1.7	.6	1.0
21	---	---	---	4.3	.8	2.7	.9	-.3	.0	1.5	-.2	.6
22	---	---	---	4.2	2.0	3.0	.2	-.2	-.1	.3	-.3	-.1
23	---	---	---	2.3	1.7	2.0	-.2	-.2	-.2	-.1	-.4	-.2
24	---	---	---	3.8	1.9	2.7	-.2	-.2	-.2	.0	-.3	-.2
25	---	---	---	2.2	.0	1.3	-.2	-.3	-.2	.8	-.2	.1
26	8.8	2.8	5.4	4.5	1.8	3.1	.1	-.2	-.1	.9	-.3	.1
27	8.4	5.8	7.4	4.4	1.3	3.5	.8	.0	.4	.1	-.3	-.1
28	8.1	5.1	7.0	2.7	.8	1.9	.7	-.3	.3	1.0	.1	.6
29	7.1	3.5	5.4	3.3	1.6	2.4	.1	-.2	-.1	2.2	.5	1.2
30	9.2	4.2	6.1	3.2	.4	2.0	1.0	.0	.5	1.7	.6	1.2
31	9.4	3.4	6.2	---	---	---	1.0	-.3	.3	2.0	.4	1.3
MONTH	---	---	---	13.1	-.2	4.7	4.5	-.3	.9	3.2	-.4	.7

e Estimated

## CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.0	-0.3	0.6	5.1	4.3	4.7	15.3	7.8	10.6	16.5	11.1	14.1
2	2.4	-.3	.9	7.5	4.0	5.5	8.5	7.3	7.9	15.4	12.1	13.6
3	3.5	.9	2.0	5.4	4.0	4.7	10.6	6.9	8.6	15.5	12.4	13.6
4	2.4	1.0	1.7	6.6	2.7	4.8	7.7	6.0	6.8	15.9	11.7	13.6
5	1.3	.2	.6	5.2	3.4	4.3	6.5	4.8	5.7	16.8	12.1	14.1
6	1.7	-.3	.5	5.7	2.0	3.8	8.9	4.7	6.6	14.9	12.8	13.6
7	1.2	-.3	.3	5.2	3.3	4.3	12.8	4.5	8.3	14.5	13.2	13.8
8	2.0	-.2	.6	5.6	2.4	4.1	12.1	5.3	8.8	15.3	12.8	13.9
9	1.6	-.3	.4	8.4	3.7	5.3	10.9	7.5	9.0	13.7	12.0	12.5
10	2.4	-.3	.9	9.2	4.3	7.9	12.3	6.0	8.8	12.0	10.5	11.1
11	4.1	.8	2.2	5.3	1.0	2.9	12.6	4.7	8.5	10.5	9.6	10.2
12	2.3	.7	1.4	2.6	-.2	.8	13.2	4.8	8.7	15.2	9.2	11.7
13	3.2	.4	1.4	2.4	-.3	.8	13.9	4.8	9.2	14.3	9.0	11.1
14	1.2	-.3	.2	1.9	.3	1.1	14.4	5.8	9.9	15.4	8.5	11.6
15	.1	-.3	-.2	3.5	.3	1.8	13.0	6.8	9.7	17.4	9.0	13.1
16	.3	-.2	.0	4.2	.2	2.1	14.0	8.4	11.0	17.8	12.2	14.9
17	1.5	.0	.7	5.5	-.2	2.4	13.1	11.2	12.2	15.0	11.7	13.4
18	.5	-.1	.2	4.1	1.0	2.6	14.7	9.2	11.9	18.4	12.0	15.0
19	1.1	.1	.6	3.3	2.1	2.6	12.4	9.5	10.9	18.0	12.9	15.3
20	3.8	.3	1.8	3.1	1.9	2.4	10.8	8.9	9.9	17.6	12.2	14.9
21	4.0	1.5	2.6	2.4	.4	1.3	15.3	6.5	10.6	18.4	13.7	15.8
22	5.1	.9	2.7	.6	-.3	.2	16.4	7.5	11.8	16.6	11.9	14.2
23	2.8	.6	1.8	4.0	.1	1.8	12.2	8.4	10.0	16.7	11.1	13.9
24	2.1	1.3	1.8	6.8	.2	3.0	11.4	7.7	9.2	17.6	11.9	14.6
25	3.8	1.7	2.5	7.6	.7	3.8	11.6	8.1	9.7	15.7	11.7	13.8
26	6.1	1.4	3.3	8.8	2.1	5.4	10.3	6.1	8.4	16.8	12.2	14.6
27	6.5	1.8	3.9	13.4	5.9	9.5	14.1	6.9	10.0	17.3	12.0	14.7
28	6.9	2.2	4.5	15.5	9.2	12.0	12.0	6.2	9.1	18.5	12.9	15.7
29	---	---	---	14.9	10.1	12.4	16.7	6.1	11.1	20.0	14.9	17.3
30	---	---	---	16.1	8.4	12.3	18.6	10.5	14.1	20.2	15.4	17.6
31	---	---	---	18.9	11.9	15.2	---	---	---	17.0	13.9	15.5
MONTH	6.9	-.3	1.4	18.9	-.3	4.7	18.6	4.5	9.6	20.2	8.5	14.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	15.7	17.0	19.1	16.9	17.7	19.1	15.3	17.3	19.7	14.9	17.1
2	16.8	12.6	14.9	19.0	15.7	17.3	19.3	14.8	17.2	20.0	15.6	17.3
3	16.2	13.1	14.7	19.3	15.6	17.5	20.1	15.9	18.0	20.2	15.4	17.5
4	14.1	10.9	12.5	19.4	16.5	18.0	19.5	16.4	17.9	21.2	15.9	17.9
5	15.6	10.9	13.1	19.3	17.2	18.1	19.7	16.1	17.9	19.6	14.4	16.6
6	14.8	11.7	13.4	18.6	15.5	17.2	20.8	17.4	18.7	21.3	14.0	17.2
7	13.7	12.1	13.0	18.6	16.0	17.3	19.6	18.1	18.7	20.1	17.5	18.3
8	13.3	12.1	12.7	18.0	16.2	17.1	21.1	17.4	19.1	20.3	15.1	17.6
9	15.9	11.8	13.7	18.5	15.4	17.0	21.8	17.2	19.4	17.1	13.0	14.8
10	17.3	12.7	14.9	19.2	16.4	17.6	22.5	18.3	20.3	17.5	12.7	14.7
11	16.3	13.0	14.6	17.8	14.7	16.4	21.3	19.4	20.1	17.4	11.5	14.2
12	14.4	12.8	13.7	18.0	14.2	16.2	19.4	16.7	18.0	18.5	12.9	15.7
13	16.2	13.8	15.1	19.4	14.6	17.1	19.1	15.7	17.2	19.5	15.8	17.4
14	16.2	15.6	16.0	20.9	16.5	18.7	19.9	15.7	17.7	17.6	14.6	16.2
15	17.4	15.6	16.5	21.6	17.5	19.6	21.4	17.1	18.8	20.4	15.9	17.9
16	16.8	15.8	16.1	21.8	18.7	20.2	22.7	18.1	20.0	21.7	16.5	19.0
17	16.3	15.4	15.8	21.3	18.8	20.1	20.2	18.4	19.3	18.5	12.7	15.4
18	17.9	15.2	16.4	21.9	18.5	20.0	21.3	18.8	19.9	17.6	12.5	14.9
19	17.9	15.3	16.5	20.4	15.8	18.2	18.8	15.8	17.2	18.0	12.5	15.1
20	17.8	15.7	16.6	20.2	17.9	18.9	17.7	13.4	15.7	19.4	14.7	16.9
21	18.2	15.9	16.8	21.4	17.5	19.5	18.5	15.6	17.0	21.3	17.2	18.9
22	17.4	15.3	16.3	22.6	18.7	20.5	19.6	15.2	17.4	20.0	16.9	18.8
23	16.7	15.6	16.2	21.9	19.1	20.6	18.8	16.5	17.8	16.9	11.7	14.5
24	19.1	16.0	17.4	21.1	18.8	20.3	21.8	17.9	19.8	13.1	9.1	11.3
25	19.5	17.1	18.3	19.5	16.4	18.1	22.0	19.4	20.4	14.9	10.6	12.8
26	20.3	17.7	18.9	19.1	16.2	17.7	21.0	19.2	20.1	18.0	13.7	15.4
27	19.2	16.7	18.2	19.9	15.6	17.8	22.5	18.7	20.3	20.0	15.7	17.6
28	17.4	14.8	16.2	20.8	17.5	19.1	22.6	17.6	19.7	20.3	14.4	17.6
29	17.1	15.3	16.2	21.7	18.9	20.0	19.7	18.2	18.8	16.6	11.4	13.5
30	18.0	16.5	17.0	19.9	16.9	18.5	20.8	17.7	18.8	16.5	11.6	13.8
31	---	---	---	18.7	17.2	17.9	18.3	16.9	17.6	---	---	---
MONTH	20.3	10.9	15.6	22.6	14.2	18.4	22.7	13.4	18.6	21.7	9.1	16.2

CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	0.00	0.000	0.00	1.6	16	0.06	5.4	14	0.21
2	.00	.000	.00	4.0	16	.17	3.8	13	.14
3	.00	.000	.00	2.1	16	.09	2.6	14	.09
4	.01	13	.00	1.3	16	.05	2.5	16	.10
5	.04	12	.00	.90	16	.04	2.5	14	.10
6	.02	12	.00	.66	16	.03	2.1	14	.08
7	.01	13	.00	.51	15	.02	1.7	14	.06
8	.01	13	.00	.81	15	.03	1.4	14	.05
9	.00	.000	.00	3.6	14	.13	1.1	14	.04
10	.00	.000	.00	4.1	14	.15	1.1	14	.04
11	.00	.000	.00	2.4	14	.09	.99	14	.04
12	.00	.000	.00	1.5	14	.06	.90	14	.03
13	.00	.000	.00	1.2	14	.05	.91	14	.03
14	.00	.000	.00	1.1	14	.04	.85	14	.03
15	.00	.000	.00	1.2	29	.09	.68	13	.02
16	.00	.000	.00	1.2	22	.07	.63	13	.02
17	.00	.000	.00	1.0	19	.05	.65	13	.02
18	.00	.000	.00	.91	17	.04	.63	13	.02
19	.00	.000	.00	.84	16	.04	.64	13	.02
20	.00	.000	.00	.79	16	.03	.68	14	.03
21	.00	.000	.00	.84	16	.04	.62	13	.02
22	.00	.000	.00	4.2	17	.19	.48	13	.02
23	.00	.000	.00	3.8	15	.15	.35	13	.01
24	.00	.000	.00	2.5	15	.10	.58	17	.03
25	.03	13	.00	1.8	14	.07	1.6	19	.08
26	.04	13	.00	1.7	15	.07	2.2	18	.11
27	.38	13	.01	2.7	15	.11	1.5	16	.06
28	.21	16	.01	1.9	14	.07	1.4	15	.06
29	.16	17	.01	1.6	14	.06	1.4	14	.05
30	.14	17	.01	1.7	14	.07	5.8	15	.23
31	.13	17	.01	---	---	---	e4.1	13	.15
TOTAL	1.18	---	0.05	54.46	---	2.26	51.79	---	1.99

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	e2.6	13	0.09	e4.1	14	0.15	8.3	13	0.28
2	2.0	13	.07	e3.6	14	.14	6.9	12	.23
3	2.0	13	.07	4.0	15	.16	5.9	13	.20
4	3.3	14	.12	4.4	15	.17	5.4	13	.18
5	4.5	14	.17	4.1	19	.20	5.1	13	.17
6	5.7	13	.20	e3.6	17	.16	4.8	13	.16
7	7.1	12	.23	e3.0	15	.12	4.5	13	.15
8	12	11	.37	2.9	15	.11	4.4	13	.15
9	11	11	.33	e2.5	14	.10	16	11	.49
10	7.7	12	.24	e2.6	14	.10	25	9.9	.67
11	5.3	12	.17	3.2	15	.13	12	10	.33
12	e4.0	12	.13	14	15	.52	7.3	11	.21
13	3.9	13	.14	11	12	.35	e5.3	11	.16
14	e3.4	12	.11	e5.8	12	.19	5.8	12	.18
15	e2.3	12	.08	e3.9	13	.14	5.7	12	.18
16	e4.0	16	.17	3.3	14	.12	5.3	12	.17
17	2.9	13	.10	3.3	14	.13	4.9	11	.15
18	2.6	19	.14	18	16	.65	4.9	12	.16
19	2.6	17	.12	14	12	.45	14	11	.42
20	2.6	17	.12	8.6	12	.29	15	10	.43
21	2.5	14	.09	7.0	13	.24	8.7	13	.30
22	e2.6	13	.09	5.8	13	.20	6.9	29	.54
23	2.4	22	.17	5.1	13	.18	7.1	17	.32
24	19	22	1.01	16	13	.55	7.3	14	.27
25	12	16	.55	22	12	.69	7.2	13	.25
26	e8.5	14	.31	12	12	.39	6.6	13	.23
27	e6.4	13	.23	8.3	12	.27	5.9	13	.21
28	5.2	13	.19	6.9	13	.23	5.2	13	.18
29	4.8	14	.18	---	---	---	4.6	13	.17
30	4.7	14	.18	---	---	---	4.2	13	.15
31	4.5	14	.17	---	---	---	3.9	13	.14
TOTAL	164.1	---	6.34	203.0	---	7.13	234.1	---	7.83

e Estimated

## CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	4.0	14	0.15	2.7	12	0.09	8.7	11	0.26
2	7.2	14	.26	6.0	12	.20	3.8	11	.11
3	5.4	13	.19	5.5	12	.18	4.6	11	.14
4	4.4	13	.15	6.2	12	.20	2.7	11	.08
5	4.0	13	.14	8.3	12	.27	2.0	11	.06
6	3.7	13	.13	22	10	.60	1.6	12	.05
7	3.4	13	.12	20	9.7	.53	3.2	11	.10
8	3.3	13	.11	12	10	.34	7.1	11	.21
9	4.2	13	.15	8.6	11	.25	5.2	11	.16
10	4.9	13	.17	26	9.4	.65	2.9	11	.09
11	3.7	13	.13	27	8.9	.64	2.0	11	.06
12	3.2	13	.11	25	8.9	.59	1.7	12	.05
13	2.9	13	.10	13	9.6	.34	53	8.5	.83
14	2.7	13	.09	9.7	10	.26	e75	4.9	.99
15	2.5	13	.09	8.2	10	.23	51	6.3	.86
16	2.5	13	.09	7.1	11	.20	34	7.1	.65
17	3.2	13	.11	6.4	11	.19	19	7.9	.41
18	4.0	13	.14	5.9	11	.17	14	8.4	.32
19	3.1	13	.11	5.1	11	.15	11	8.8	.26
20	7.1	13	.24	4.5	11	.14	9.0	9.0	.22
21	4.8	12	.16	4.0	11	.12	7.8	9.2	.19
22	3.6	12	.12	3.5	11	.10	6.9	9.4	.17
23	4.6	12	.15	3.0	11	.09	6.0	9.5	.15
24	12	11	.36	2.6	12	.08	5.3	9.5	.14
25	6.4	12	.20	2.4	12	.08	4.6	9.7	.12
26	4.6	12	.15	2.3	12	.07	4.7	9.8	.12
27	4.0	12	.13	1.9	12	.06	4.2	9.7	.11
28	3.5	12	.12	1.6	12	.05	3.6	9.7	.09
29	3.2	12	.11	1.6	12	.05	3.1	9.7	.08
30	3.0	12	.10	1.6	12	.05	6.6	9.5	.17
31	---	---	---	2.0	12	.07	---	---	---
TOTAL	129.1	---	4.38	255.7	---	7.04	364.3	---	7.25

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	10	8.9	0.24	1.1	11	0.03	0.19	13	0.01
2	7.8	8.9	.19	.60	11	.02	.18	13	.01
3	5.9	9.2	.14	.42	11	.01	.19	13	.01
4	4.9	9.4	.13	.33	12	.01	.16	13	.01
5	4.2	9.6	.11	.29	12	.01	.13	13	.00
6	3.6	9.7	.09	.26	12	.01	.12	13	.00
7	3.0	9.9	.08	.47	13	.02	.16	13	.00
8	2.7	10	.07	.34	13	.01	.19	13	.01
9	2.2	10	.06	.25	13	.01	.14	13	.00
10	1.7	10	.05	.22	13	.01	.13	13	.00
11	1.2	10	.03	.22	12	.01	.11	13	.00
12	.92	10	.03	.33	12	.01	.11	13	.00
13	.79	10	.02	.28	13	.01	.11	13	.00
14	.68	10	.02	.22	13	.01	.10	13	.00
15	.59	11	.02	.20	13	.01	.15	13	.00
16	.52	11	.01	.18	12	.01	.16	13	.00
17	.48	11	.01	1.9	12	.06	.12	13	.00
18	.44	11	.01	1.6	12	.05	.10	13	.00
19	.37	11	.01	.68	13	.02	.09	13	.00
20	.41	11	.01	.43	13	.01	.08	13	.00
21	.40	11	.01	.34	13	.01	.08	13	.00
22	.32	11	.01	.28	13	.01	.68	13	.02
23	5.2	10	.14	.25	13	.01	.54	14	.02
24	4.9	10	.13	.38	13	.01	.25	14	.01
25	1.6	10	.04	.25	14	.01	.19	14	.01
26	.99	10	.03	.28	13	.01	.17	15	.01
27	.69	11	.02	.24	13	.01	.17	15	.01
28	.51	11	.01	.19	14	.01	.15	14	.01
29	.59	11	.02	.21	13	.01	.13	14	.00
30	.61	11	.02	.20	13	.01	.14	14	.00
31	1.8	11	.05	.21	13	.01	---	---	---
TOTAL	70.01	---	1.81	13.15	---	0.45	5.22	---	0.14
YEAR	1546.11		46.67						

e Estimated

CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)	OCTOBER			NOVEMBER			DECEMBER		
				MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)
1	0.00	0.000	0.00	1.6	49	0.16	5.4	37	0.54			
2	.00	.000	.00	4.0	48	.50	3.8	32	.33			
3	.00	.000	.00	2.1	47	.27	2.6	34	.23			
4	.01	30	.00	1.3	47	.16	2.5	47	.31			
5	.04	27	.00	.90	47	.11	2.5	38	.26			
6	.02	25	.00	.66	46	.08	2.1	37	.21			
7	.01	30	.00	.51	44	.06	1.7	36	.16			
8	.01	31	.00	.81	42	.09	1.4	36	.14			
9	.00	.000	.00	3.6	37	.34	1.1	34	.10			
10	.00	.000	.00	4.1	34	.38	1.1	36	.10			
11	.00	.000	.00	2.4	36	.23	.99	35	.09			
12	.00	.000	.00	1.5	38	.16	.90	35	.09			
13	.00	.000	.00	1.2	39	.12	.91	36	.09			
14	.00	.000	.00	1.1	35	.10	.85	34	.08			
15	.00	.000	.00	1.2	213	.65	.68	33	.06			
16	.00	.000	.00	1.2	102	.32	.63	31	.05			
17	.00	.000	.00	1.0	68	.19	.65	31	.05			
18	.00	.000	.00	.91	55	.14	.63	31	.05			
19	.00	.000	.00	.84	48	.11	.64	33	.06			
20	.00	.000	.00	.79	48	.10	.68	34	.06			
21	.00	.000	.00	.84	47	.11	.62	31	.05			
22	.00	.000	.00	4.2	58	.65	.48	33	.04			
23	.00	.000	.00	3.8	43	.44	.35	29	.03			
24	.00	.000	.00	2.5	41	.28	.58	59	.09			
25	.03	32	.00	1.8	39	.19	1.6	69	.33			
26	.04	31	.00	1.7	40	.18	2.2	63	.39			
27	.38	30	.03	2.7	45	.32	1.5	47	.19			
28	.21	48	.03	1.9	38	.20	1.4	41	.16			
29	.16	54	.02	1.6	39	.16	1.4	35	.13			
30	.14	54	.02	1.7	38	.18	5.8	43	.66			
31	.13	54	.02	---	---	---	e4.1	33	.36			
TOTAL	1.18	---	0.12	54.46	---	6.98	51.79	---	5.49			

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)	JANUARY			FEBRUARY			MARCH		
				MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/DAY)
1	e2.6	29	0.20	e4.1	36	0.40	8.3	29	0.64			
2	2.0	29	.16	e3.6	37	.36	6.9	28	.52			
3	2.0	33	.17	4.0	41	.44	5.9	29	.47			
4	3.3	35	.31	4.4	41	.49	5.4	29	.42			
5	4.5	34	.42	4.1	71	.78	5.1	29	.41			
6	5.7	32	.50	e3.6	55	.54	4.8	30	.38			
7	7.1	28	.53	e3.0	41	.33	4.5	30	.36			
8	12	23	.75	2.9	39	.31	4.4	30	.36			
9	11	24	.68	e2.5	38	.26	16	24	.98			
10	7.7	24	.50	e2.6	39	.27	25	17	1.18			
11	5.3	27	.38	3.2	40	.35	12	19	.62			
12	e4.0	26	.28	14	44	1.42	7.3	20	.40			
13	3.9	33	.34	11	27	.78	e5.3	23	.32			
14	e3.4	27	.25	e5.8	28	.44	5.8	24	.38			
15	e2.3	27	.17	e3.9	32	.34	5.7	24	.38			
16	e4.0	52	.56	3.3	35	.31	5.3	24	.35			
17	2.9	33	.25	3.3	36	.32	4.9	24	.31			
18	2.6	93	.66	18	65	1.89	4.9	25	.34			
19	2.6	61	.42	14	25	.95	14	23	.83			
20	2.6	58	.41	8.6	28	.66	15	20	.80			
21	2.5	37	.25	7.0	30	.57	8.7	34	.75			
22	e2.6	32	.22	5.8	31	.48	6.9	177	3.30			
23	2.4	144	1.36	5.1	32	.44	7.1	55	1.04			
24	19	126	4.81	16	32	1.30	7.3	34	.67			
25	12	54	1.79	22	24	1.45	7.2	31	.60			
26	e8.5	35	.81	12	25	.83	6.6	30	.54			
27	e6.4	33	.56	8.3	28	.62	5.9	31	.49			
28	5.2	33	.47	6.9	29	.53	5.2	32	.44			
29	4.8	36	.46	---	---	---	4.6	33	.41			
30	4.7	37	.46	---	---	---	4.2	32	.36			
31	4.5	38	.46	---	---	---	3.9	33	.35			
TOTAL	164.1	---	19.59	203.0	---	17.86	234.1	---	19.40			

e Estimated



CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	4.0	36	0.41	2.7	28	0.20	8.7	21	0.50
2	7.2	34	.66	6.0	28	.46	3.8	22	.22
3	5.4	29	.43	5.5	27	.40	4.6	23	.29
4	4.4	30	.35	6.2	27	.45	2.7	22	.16
5	4.0	30	.32	8.3	26	.58	2.0	23	.13
6	3.7	30	.29	22	19	1.07	1.6	24	.10
7	3.4	30	.28	20	17	.90	3.2	24	.20
8	3.3	30	.26	12	19	.61	7.1	22	.41
9	4.2	33	.37	8.6	21	.47	5.2	23	.31
10	4.9	32	.43	26	15	1.05	2.9	22	.17
11	3.7	30	.30	27	14	.98	2.0	24	.13
12	3.2	30	.25	25	14	.91	1.7	24	.11
13	2.9	30	.23	13	16	.57	53	14	.83
14	2.7	30	.22	9.7	18	.47	e75	3.7	.76
15	2.5	30	.21	8.2	20	.43	51	6.6	.88
16	2.5	30	.20	7.1	21	.39	34	8.4	.76
17	3.2	31	.27	6.4	21	.36	19	11	.55
18	4.0	32	.35	5.9	22	.34	14	12	.46
19	3.1	29	.25	5.1	22	.30	11	13	.39
20	7.1	30	.57	4.5	22	.27	9.0	14	.34
21	4.8	28	.36	4.0	23	.25	7.8	15	.31
22	3.6	28	.28	3.5	23	.21	6.9	15	.29
23	4.6	27	.32	3.0	23	.19	6.0	16	.25
24	12	23	.73	2.6	24	.17	5.3	16	.23
25	6.4	24	.41	2.4	24	.16	4.6	16	.20
26	4.6	25	.31	2.3	24	.15	4.7	17	.21
27	4.0	26	.28	1.9	25	.13	4.2	17	.19
28	3.5	26	.25	1.6	25	.11	3.6	16	.16
29	3.2	27	.23	1.6	26	.11	3.1	16	.14
30	3.0	28	.22	1.6	28	.12	6.6	16	.27
31	---	---	---	2.0	26	.14	---	---	---
TOTAL	129.1	---	10.04	255.7	---	12.95	364.3	---	9.95

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	10	14	0.37	1.1	21	0.06	0.19	33	0.02
2	7.8	14	.29	.60	22	.04	.18	32	.01
3	5.9	15	.23	.42	23	.03	.19	31	.02
4	4.9	15	.20	.33	24	.02	.16	32	.01
5	4.2	16	.19	.29	24	.02	.13	31	.01
6	3.6	17	.16	.26	26	.02	.12	30	.01
7	3.0	17	.14	.47	29	.04	.16	30	.01
8	2.7	18	.13	.34	29	.03	.19	29	.01
9	2.2	17	.10	.25	30	.02	.14	30	.01
10	1.7	18	.08	.22	29	.02	.13	30	.01
11	1.2	18	.06	.22	28	.02	.11	30	.01
12	.92	18	.05	.33	28	.03	.11	30	.01
13	.79	19	.04	.28	30	.02	.11	30	.01
14	.68	19	.04	.22	30	.02	.10	30	.01
15	.59	20	.03	.20	29	.01	.15	30	.01
16	.52	20	.03	.18	28	.01	.16	29	.01
17	.48	20	.03	1.9	26	.12	.12	31	.01
18	.44	20	.02	1.6	28	.12	.10	31	.01
19	.37	20	.02	.68	29	.05	.09	31	.01
20	.41	21	.02	.43	31	.04	.08	31	.01
21	.40	21	.02	.34	33	.03	.08	31	.01
22	.32	21	.02	.28	33	.03	.68	29	.04
23	5.2	20	.24	.25	33	.02	.54	35	.05
24	4.9	18	.23	.38	32	.03	.25	38	.03
25	1.6	18	.08	.25	34	.02	.19	39	.02
26	.99	19	.05	.28	33	.02	.17	40	.02
27	.69	20	.04	.24	34	.02	.17	40	.02
28	.51	21	.03	.19	34	.02	.15	39	.01
29	.59	22	.04	.21	33	.02	.13	37	.01
30	.61	22	.04	.20	33	.02	.14	36	.01
31	1.8	22	.10	.21	32	.02	---	---	---
TOTAL	70.01	---	3.12	13.15	---	0.99	5.22	---	0.44
YEAR	1546.11	---	106.93	---	---	---	---	---	---

e Estimated

CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.00	0.00	0.00	1.6	86	0.27	5.4	65	0.95
2	.00	.00	.00	4.0	84	.88	3.8	57	.58
3	.00	.00	.00	2.1	83	.48	2.6	59	.41
4	.01	53	.00	1.3	83	.28	2.5	82	.55
5	.04	47	.00	.90	82	.20	2.5	68	.46
6	.02	45	.00	.66	80	.14	2.1	64	.37
7	.01	53	.00	.51	77	.11	1.7	63	.28
8	.01	55	.00	.81	75	.16	1.4	63	.24
9	.00	.00	.00	3.6	65	.60	1.1	59	.18
10	.00	.00	.00	4.1	60	.66	1.1	63	.18
11	.00	.00	.00	2.4	63	.41	.99	62	.17
12	.00	.00	.00	1.5	67	.28	.90	61	.15
13	.00	.00	.00	1.2	69	.21	.91	63	.16
14	.00	.00	.00	1.1	62	.19	.85	60	.14
15	.00	.00	.00	1.2	380	1.16	.68	58	.11
16	.00	.00	.00	1.2	180	.57	.63	55	.09
17	.00	.00	.00	1.0	120	.33	.65	54	.09
18	.00	.00	.00	.91	98	.24	.63	54	.09
19	.00	.00	.00	.84	85	.19	.64	58	.10
20	.00	.00	.00	.79	85	.18	.68	59	.11
21	.00	.00	.00	.84	84	.19	.62	55	.09
22	.00	.00	.00	4.2	100	1.14	.48	59	.08
23	.00	.00	.00	3.8	77	.77	.35	51	.05
24	.00	.00	.00	2.5	72	.49	.58	100	.16
25	.03	56	.00	1.8	69	.34	1.6	120	.58
26	.04	54	.01	1.7	71	.32	2.2	110	.68
27	.38	52	.05	2.7	80	.57	1.5	82	.34
28	.21	86	.05	1.9	68	.35	1.4	72	.28
29	.16	95	.04	1.6	68	.28	1.4	62	.23
30	.14	95	.04	1.7	67	.31	5.8	76	1.16
31	.13	95	.03	---	---	---	e4.1	58	.64
TOTAL	1.18	---	0.22	54.46	---	12.30	51.79	---	9.70

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e2.6	51	0.36	e4.1	63	0.70	8.3	51	1.13
2	2.0	52	.28	e3.6	65	.63	6.9	49	.91
3	2.0	58	.31	4.0	72	.77	5.9	51	.82
4	3.3	62	.55	4.4	72	.86	5.4	51	.74
5	4.5	60	.73	4.1	130	1.38	5.1	52	.71
6	5.7	57	.88	e3.6	98	.95	4.8	52	.67
7	7.1	49	.93	e3.0	72	.58	4.5	52	.63
8	12	40	1.32	2.9	70	.55	4.4	52	.63
9	11	41	1.19	e2.5	67	.45	16	42	1.72
10	7.7	43	.89	e2.6	68	.48	25	30	2.07
11	5.3	48	.68	3.2	70	.62	12	34	1.08
12	e4.0	46	.49	14	77	2.51	7.3	36	.70
13	3.9	57	.61	11	48	1.37	e5.3	40	.57
14	e3.4	47	.43	e5.8	49	.77	5.8	42	.67
15	e2.3	48	.30	e3.9	56	.59	5.7	43	.66
16	e4.0	91	.98	3.3	61	.54	5.3	43	.61
17	2.9	57	.45	3.3	64	.57	4.9	42	.55
18	2.6	160	1.17	18	110	3.34	4.9	44	.59
19	2.6	110	.74	14	44	1.67	14	41	1.47
20	2.6	100	.72	8.6	50	1.16	15	34	1.41
21	2.5	66	.44	7.0	53	1.00	8.7	60	1.33
22	e2.6	56	.39	5.8	54	.85	6.9	310	5.86
23	2.4	260	2.42	5.1	57	.77	7.1	97	1.83
24	19	220	8.54	16	57	2.29	7.3	60	1.19
25	12	96	3.17	22	43	2.56	7.2	55	1.06
26	e8.5	62	1.42	12	44	1.46	6.6	54	.96
27	e6.4	57	.99	8.3	49	1.08	5.9	54	.86
28	5.2	59	.82	6.9	50	.93	5.2	56	.78
29	4.8	63	.81	---	---	---	4.6	57	.72
30	4.7	65	.82	---	---	---	4.2	57	.64
31	4.5	67	.82	---	---	---	3.9	58	.61
TOTAL	164.1	---	34.65	203.0	---	31.43	234.1	---	34.18

e Estimated

## CHARLES RIVER BASIN

01104405 HOBBS BROOK AT MILL STREET NEAR LINCOLN, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	4.0	63	0.71	2.7	49	0.35	8.7	38	0.88
2	7.2	60	1.17	6.0	50	.81	3.8	38	.39
3	5.4	52	.75	5.5	47	.70	4.6	40	.50
4	4.4	52	.62	6.2	47	.79	2.7	39	.29
5	4.0	53	.56	8.3	46	1.01	2.0	40	.22
6	3.7	52	.52	22	33	1.87	1.6	43	.18
7	3.4	53	.49	20	29	1.58	3.2	42	.35
8	3.3	53	.47	12	33	1.07	7.1	38	.73
9	4.2	57	.64	8.6	36	.83	5.2	40	.55
10	4.9	57	.75	26	27	1.84	2.9	39	.31
11	3.7	53	.53	27	24	1.72	2.0	41	.23
12	3.2	53	.45	25	24	1.59	1.7	43	.20
13	2.9	53	.41	13	28	1.01	53	25	1.44
14	2.7	53	.39	9.7	32	.83	e75	6.5	1.32
15	2.5	53	.36	8.2	34	.76	51	12	1.53
16	2.5	53	.35	7.1	36	.69	34	15	1.33
17	3.2	54	.47	6.4	37	.64	19	18	.95
18	4.0	57	.61	5.9	38	.60	14	21	.80
19	3.1	52	.43	5.1	39	.53	11	23	.69
20	7.1	52	1.00	4.5	39	.47	9.0	25	.60
21	4.8	49	.63	4.0	40	.44	7.8	26	.55
22	3.6	50	.49	3.5	40	.37	6.9	27	.50
23	4.6	47	.57	3.0	41	.34	6.0	28	.45
24	12	41	1.29	2.6	42	.30	5.3	28	.40
25	6.4	42	.72	2.4	42	.27	4.6	29	.36
26	4.6	44	.55	2.3	43	.26	4.7	29	.37
27	4.0	46	.50	1.9	43	.22	4.2	29	.33
28	3.5	46	.44	1.6	44	.19	3.6	29	.28
29	3.2	47	.41	1.6	46	.19	3.1	29	.24
30	3.0	49	.39	1.6	48	.22	6.6	28	.48
31	---	---	---	2.0	46	.25	---	---	---
TOTAL	129.1	---	17.67	255.7	---	22.74	364.3	---	17.45

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	10	24	0.65	1.1	37	0.12	0.19	59	0.03
2	7.8	24	.50	.60	39	.06	.18	56	.03
3	5.9	26	.41	.42	41	.05	.19	55	.03
4	4.9	27	.36	.33	42	.04	.16	56	.02
5	4.2	28	.32	.29	42	.03	.13	54	.02
6	3.6	29	.28	.26	45	.03	.12	53	.02
7	3.0	30	.25	.47	51	.06	.16	52	.02
8	2.7	31	.22	.34	52	.05	.19	51	.03
9	2.2	31	.18	.25	53	.04	.14	53	.02
10	1.7	31	.14	.22	52	.03	.13	53	.02
11	1.2	31	.10	.22	50	.03	.11	52	.02
12	.92	32	.08	.33	49	.04	.11	52	.02
13	.79	33	.07	.28	53	.04	.11	53	.01
14	.68	34	.06	.22	53	.03	.10	52	.01
15	.59	35	.05	.20	51	.03	.15	52	.02
16	.52	35	.05	.18	50	.02	.16	50	.02
17	.48	36	.05	1.9	45	.21	.12	54	.02
18	.44	36	.04	1.6	49	.21	.10	55	.01
19	.37	35	.04	.68	51	.09	.09	55	.01
20	.41	37	.04	.43	55	.06	.08	55	.01
21	.40	37	.04	.34	58	.05	.08	54	.01
22	.32	37	.03	.28	59	.04	.68	52	.08
23	5.2	34	.43	.25	58	.04	.54	61	.09
24	4.9	31	.40	.38	57	.06	.25	66	.04
25	1.6	31	.14	.25	60	.04	.19	69	.04
26	.99	33	.09	.28	58	.04	.17	70	.03
27	.69	35	.06	.24	59	.04	.17	70	.03
28	.51	37	.05	.19	59	.03	.15	68	.03
29	.59	38	.06	.21	57	.03	.13	66	.02
30	.61	39	.06	.20	59	.03	.14	64	.02
31	1.8	38	.18	.21	56	.03	---	---	---
TOTAL	70.01	---	5.43	13.15	---	1.70	5.22	---	0.78
YEAR	1546.11		188.25						

e Estimated



USGS drill rig installs ground-water-level observation well, Princeton 64, in Princeton, Mass. (photo by R. S. Socolow).



01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

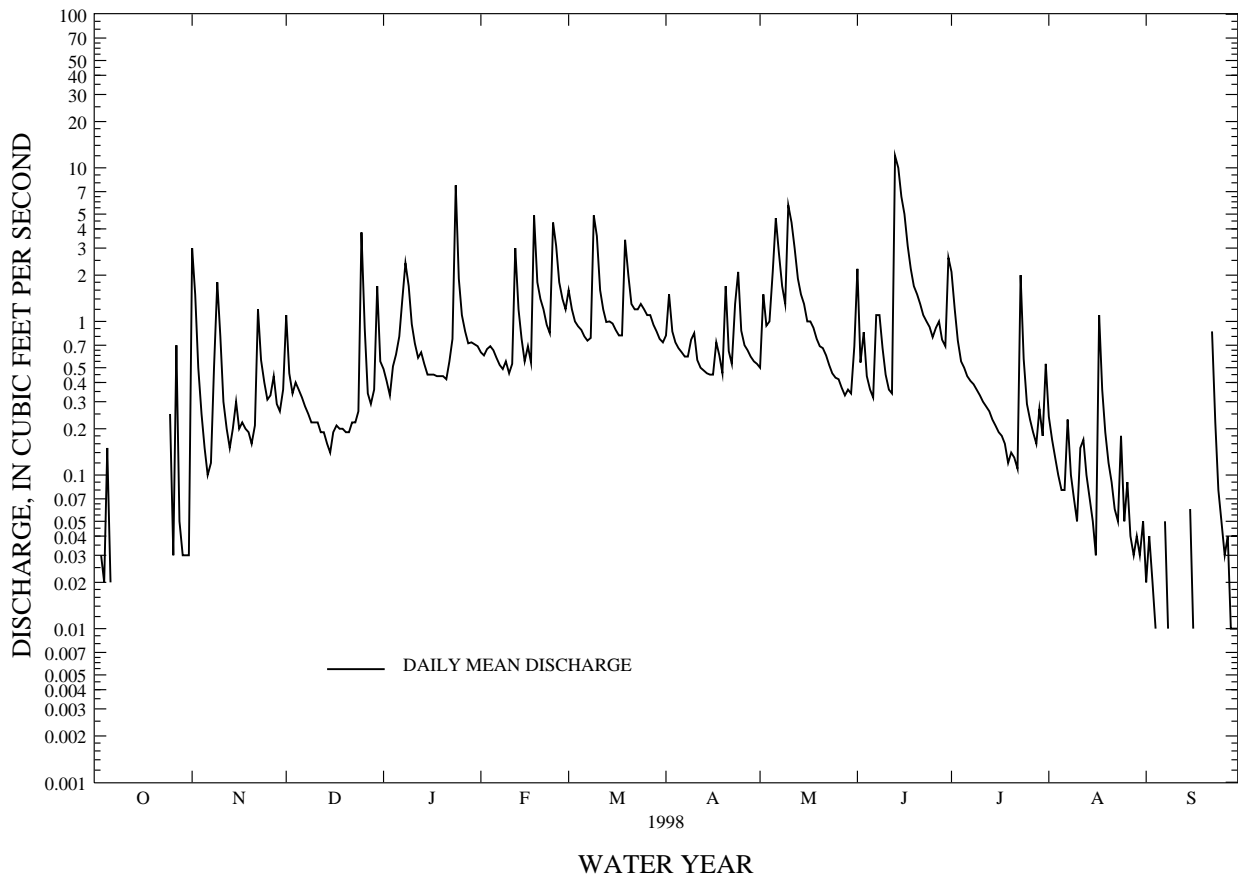
SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	288.13	
ANNUAL MEAN	.79	
HIGHEST DAILY MEAN	12	Jun 13
LOWEST DAILY MEAN	.00	Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 7
INSTANTANEOUS PEAK FLOW	34	Jun 13
INSTANTANEOUS PEAK STAGE	2.01	Jun 13
INSTANTANEOUS LOW FLOW	.00	Oct 1
ANNUAL RUNOFF (CFSM)	2.26	
ANNUAL RUNOFF (INCHES)	30.62	
10 PERCENT EXCEEDS	1.7	
50 PERCENT EXCEEDS	.46	
90 PERCENT EXCEEDS	.01	

e Estimated

CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1,  
NEAR LEXINGTON, MA 01104410



CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to September 1998.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1997 to September 1998.

WATER TEMPERATURE: November 1997 to September 1998.

CALCIUM CONCENTRATION: October 1997 to September 1998.

CALCIUM LOAD: October 1997 to September 1998.

SODIUM CONCENTRATION: October 1997 to September 1998.

SODIUM LOAD: October 1997 to September 1998.

CHLORIDE CONCENTRATION: October 1997 to September 1998.

CHLORIDE LOAD: October 1997 to September 1998.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

REMARKS.--Records good, except those for estimated daily specific conductances, which are poor. Calcium, sodium, and chloride concentrations and loads records are good, except those for which have estimated daily discharge and/or specific conductance.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,430 µS/cm, Nov. 8; minimum, 54 µS/cm, June 13.

WATER TEMPERATURE: Maximum recorded, 25.1°C, July 29; minimum, -0.2°C, many days.

CALCIUM CONCENTRATION: Maximum daily mean, 54 mg/L, Nov. 7; minimum daily mean, 5.4 mg/L, June 14.

CALCIUM LOAD: Maximum daily, 0.43 tons, Jan. 24; minimum daily, 0.00 tons, many days.

SODIUM CONCENTRATION: Maximum daily mean, 182 mg/L, Nov. 7; minimum daily mean, 28 mg/L, June 14.

SODIUM LOAD: Maximum daily, 1.73 tons, Jan. 24; minimum daily, 0.00 tons, many days.

CHLORIDE CONCENTRATION: Maximum daily mean, 370 mg/L, Nov. 6, 7; minimum daily mean, 45 mg/L, June 14.

CHLORIDE LOAD: Maximum daily, 3.22 tons, Jan. 24; minimum daily, 0.00 tons, many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT										
27...	1130	0.73	459	6.3	--	7.9	745	9.2	79	--
NOV										
18...	1100	.61	1320	6.5	--	2.5	765	10.8	79	--
19...	1105	.19	1330	6.8	--	1.5	768	--	--	45
22...	0945	3.2	593	6.1	--	2.5	--	11.0	81	20
DEC										
15...	1015	.86	1260	6.2	-3.0	.0	757	--	--	47
16...	1000	.19	1210	6.4	--	-.2	761	10.1	69	--
JAN										
13...	1115	2.4	749	6.6	--	3.1	758	11.6	87	30
24...	1110	5.8	589	6.8	1.5	.2	749	--	--	15
FEB										
12...	1215	3.5	622	6.7	15.0	2.6	737	--	--	17
MAR										
17...	1030	.86	676	6.3	5.0	3.0	773	11.5	84	26
23...	1150	1.1	644	6.7	3.6	3.4	752	--	--	22
APR										
13...	1030	.47	785	6.5	17.5	8.0	764	--	--	29
MAY										
12...	1000	2.9	388	6.3	12.2	10.2	761	9.0	80	--
18...	1105	1.0	598	6.8	24.6	15.2	751	--	--	23
JUN										
02...	1415	.50	728	6.9	24.0	15.9	746	--	--	28
JUL										
07...	1100	.36	774	6.9	27.4	16.9	759	8.0	83	31
28...	1015	.03	813	7.2	25.5	19.0	758	--	--	34
AUG										
11...	1250	.05	818	7.0	--	20.4	751	7.2	81	--
SEP										
16...	1015	.01	1170	6.8	23.3	19.3	757	7.2	79	43

CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
27...	--	--	--	--	--	--	--	--	--	<0.010
NOV										
18...	--	--	--	30	24	--	--	--	--	<.010
19...	--	181	--	--	--	360	--	--	--	--
22...	3.1	84	1.7	--	14	160	<0.10	5.6	339	.010
DEC										
15...	--	166	--	--	--	340	--	--	--	--
16...	--	--	--	--	19	--	--	--	--	<.010
JAN										
13...	4.8	108	1.5	20	16	210	<.10	10	426	<.010
24...	2.4	93	1.3	--	8.1	160	<.10	4.4	323	.011
FEB										
12...	--	98	--	--	--	170	--	--	--	--
MAR										
17...	4.0	92	1.5	--	12	170	<.10	9.9	358	<.010
23...	--	94	--	--	--	170	--	--	--	--
APR										
13...	--	111	--	--	--	210	--	--	--	.018
MAY										
12...	--	--	--	--	7.5	--	--	--	--	<.010
18...	--	83	--	--	--	150	--	--	--	--
JUN										
02...	--	97	--	--	--	190	--	--	--	--
JUL										
07...	4.9	103	1.5	--	8.9	190	<.10	11	435	.010
28...	--	103	--	--	--	220	--	--	--	--
AUG										
11...	--	--	--	--	8.0	--	--	--	--	.013
SEP										
16...	7.0	155	2.4	--	12	310	<.10	10	585	.013



## CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
27...	0.055	<0.015	0.52	0.31	0.017	<0.010	<0.010	--	--	7.7
NOV										
18...	.134	.050	.32	.26	<.010	<.010	.017	390	338	4.6
19...	--	--	--	--	--	--	--	--	--	--
22...	.230	.021	.27	.32	<.010	<.010	.021	280	117	--
DEC										
15...	--	--	--	--	--	--	--	--	--	--
16...	.272	.076	.20	.22	<.010	<.010	<.010	430	418	--
JAN										
13...	.316	.024	.21	.22	<.010	.019	.017	260	213	--
24...	.166	.059	.37	.26	.024	<.010	.014	180	109	--
FEB										
12...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	.144	.078	.19	.17	<.010	<.010	.001	230	171	3.5
23...	--	--	--	--	--	--	--	--	--	--
APR										
13...	.130	.066	.28	.23	.011	<.010	.003	--	--	--
MAY										
12...	.063	.026	.43	.33	.010	<.010	.008	320	77	--
18...	--	--	--	--	--	--	--	--	--	--
JUN										
02...	--	--	--	--	--	--	--	--	--	--
JUL										
07...	.087	.123	.43	.26	<.010	<.010	<.001	780	406	--
28...	--	--	--	--	--	--	--	--	--	--
AUG										
11...	.189	.153	.20	.18	<.010	<.010	.001	48	115	--
SEP										
16...	.275	.138	.59	.41	.047	.175	.001	160	569	--

CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	e1200	e200	e700	946	559	787	872	817	841
2	---	---	---	e1100	e600	e900	1000	931	971	986	802	862
3	e1200	e900	e1130	e1240	e1100	e1170	1060	957	1010	977	930	956
4	e1200	e1200	e1200	e1300	e1240	e1270	1290	874	1060	1020	920	962
5	e1200	e800	e1150	e1340	e1300	e1320	1050	916	1010	981	909	946
6	e1200	e1200	e1200	e1380	e1360	e1360	1070	1040	1060	946	767	871
7	---	---	---	1410	1360	1370	1080	1010	1050	888	416	732
8	---	---	---	1430	732	1060	1080	1030	1070	558	380	505
9	---	---	---	987	300	695	1080	937	1020	599	410	552
10	---	---	---	978	782	911	1080	1020	1060	660	581	626
11	---	---	---	1070	978	1020	1110	948	1050	686	658	671
12	---	---	---	1140	1070	1110	1100	947	1040	721	641	687
13	---	---	---	1190	1140	1160	1130	1000	1070	734	675	713
14	---	---	---	1200	934	1040	1120	956	1040	757	652	700
15	---	---	---	1380	936	1060	1010	925	973	774	638	706
16	---	---	---	1390	1210	1290	976	900	938	976	626	762
17	---	---	---	1250	1080	1190	1010	903	945	1250	733	825
18	---	---	---	1290	1160	1230	1050	910	978	1350	764	918
19	---	---	---	1330	1110	1240	1100	925	1030	1410	840	990
20	---	---	---	1320	1190	1260	1120	1030	1090	1150	839	950
21	---	---	---	1320	969	1190	1100	967	1000	903	831	865
22	---	---	---	1070	573	833	1040	919	976	897	763	813
23	---	---	---	1120	1070	1080	1200	874	1000	1200	738	805
24	---	---	---	1130	1040	1090	1190	838	880	1270	394	533
25	e1200	e800	e1060	1130	978	1080	929	614	845	949	468	604
26	e1200	e1200	e1200	1130	926	1070	1270	916	1060	652	560	606
27	e1200	e400	e725	1120	879	1060	1210	1160	1180	637	543	590
28	e1200	e850	e1000	1140	1080	1110	1180	1030	1140	648	619	638
29	e1200	e1200	e1200	1140	1110	1130	1050	727	987	664	605	643
30	e1200	e1200	e1200	1140	663	1020	935	407	756	678	642	663
31	e1200	e1200	e1200	---	---	---	979	829	914	690	656	672
MONTH	---	---	---	1430	200	1100	1290	407	1000	1410	380	749
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	705	644	682	524	424	495	717	543	674	697	665	682
2	717	648	689	538	518	527	655	456	621	692	428	594
3	712	663	690	551	535	540	670	639	655	684	435	637
4	694	667	684	571	551	559	679	641	658	678	491	610
5	1290	675	831	589	562	573	681	653	666	633	415	537
6	1180	701	823	601	573	588	695	650	673	476	287	373
7	776	663	730	605	574	591	715	667	700	416	297	380
8	773	701	744	627	487	604	716	497	691	458	416	434
9	771	660	721	487	169	360	713	487	677	486	458	472
10	770	682	730	363	209	305	722	498	679	475	263	323
11	758	680	724	421	363	396	745	699	723	355	247	319
12	899	402	593	459	403	434	748	710	732	380	322	351
13	651	598	630	492	404	454	780	707	749	422	380	401
14	703	581	641	504	473	494	787	747	767	461	422	443
15	699	594	651	544	500	525	785	748	768	486	454	471
16	721	598	658	562	539	549	811	748	781	527	484	510
17	690	651	677	569	533	552	808	428	745	551	522	533
18	831	185	409	587	553	566	815	709	783	615	551	582
19	471	413	449	589	375	434	795	765	785	634	606	622
20	536	461	495	442	392	424	765	381	649	671	624	643
21	557	510	538	1210	442	571	741	700	718	703	655	671
22	598	544	567	995	573	714	746	704	726	708	687	697
23	626	573	598	684	549	617	759	308	645	710	685	699
24	624	256	395	676	527	635	574	437	537	722	697	710
25	399	292	344	674	623	648	604	572	588	729	711	721
26	474	399	440	663	628	647	612	596	604	738	717	729
27	496	472	478	680	631	656	634	601	616	757	723	740
28	524	496	510	709	649	677	644	616	629	767	753	761
29	---	---	---	715	670	689	659	621	639	775	504	734
30	---	---	---	717	660	682	671	636	655	795	611	754
31	---	---	---	723	683	704	---	---	---	783	134	693
MONTH	1290	185	611	1210	169	555	815	308	684	795	134	575

e Estimated

CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	703	254	606	509	373	479	724	682	708	e1190	e962	e1100
2	743	662	700	560	484	519	740	710	725	e1380	e388	e985
3	790	298	647	588	560	579	788	729	754	e1090	e763	e1010
4	712	682	700	630	580	614	785	750	765	e1110	e1090	e1100
5	754	709	732	661	616	631	836	774	792	---	---	---
6	768	731	749	660	624	642	909	795	836	---	---	---
7	775	317	658	667	629	649	1070	188	706	e1260	e229	e503
8	719	566	648	660	640	653	871	817	847	e1210	e696	e916
9	675	568	642	670	639	654	903	827	853	---	---	---
10	700	666	682	681	640	661	908	809	850	---	---	---
11	730	700	714	687	645	662	975	101	800	---	---	---
12	757	728	740	737	658	681	949	249	764	---	---	---
13	751	54	304	717	661	688	921	895	905	---	---	---
14	241	95	174	728	692	710	988	901	931	---	---	---
15	298	180	250	804	695	724	1010	936	971	e1100	e350	e750
16	358	249	312	716	696	706	1020	910	959	e1170	e750	e950
17	396	349	375	720	691	705	981	117	678	---	---	---
18	438	396	414	719	690	701	972	856	943	---	---	---
19	477	438	453	754	681	709	868	796	848	---	---	---
20	490	477	484	788	678	698	892	853	872	---	---	---
21	503	487	496	752	697	721	928	873	898	---	---	---
22	515	503	511	816	677	721	974	907	931	e1100	e150	e700
23	538	514	525	715	68	620	1040	930	961	e970	e920	e950
24	544	525	535	711	666	695	975	335	760	e1020	e970	e1000
25	563	542	550	688	664	678	1110	958	1000	e1070	e1020	e1050
26	580	498	554	692	672	680	1170	510	860	e1120	e1070	e1100
27	625	361	569	715	692	705	1120	986	1030	e1120	e600	e1000
28	596	575	587	745	715	729	1210	929	1010	e1100	e1100	e1100
29	623	595	605	769	313	632	1140	699	909	e1100	e1100	e1100
30	616	303	522	708	557	666	1230	938	993	e1100	e350	e800
31	---	---	---	743	256	587	1250	498	941	---	---	---
MONTH	790	54	548	816	68	661	1250	101	865	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	3.4	1.2	2.5	-0.1	-0.2	-0.1
2	---	---	---	---	---	---	3.0	.8	1.6	1.8	-.2	.5
3	---	---	---	---	---	---	3.8	.7	2.1	3.9	1.6	2.7
4	---	---	---	---	---	---	5.1	2.2	3.6	4.1	2.5	3.2
5	---	---	---	---	---	---	4.8	3.2	4.1	3.8	2.4	3.0
6	---	---	---	---	---	---	4.0	1.3	2.5	4.1	3.2	3.6
7	---	---	---	8.5	5.8	7.2	3.8	.8	2.2	3.6	1.9	2.8
8	---	---	---	8.2	7.6	7.9	4.0	.9	2.3	2.6	1.6	2.2
9	---	---	---	8.3	7.8	8.0	2.8	-.1	1.2	2.8	2.4	2.5
10	---	---	---	9.2	7.8	8.4	3.1	.8	1.9	3.8	1.8	2.6
11	---	---	---	8.8	4.8	7.3	2.5	-.2	1.3	4.1	1.6	2.5
12	---	---	---	5.9	2.8	4.0	3.1	-.2	1.5	2.1	.3	1.1
13	---	---	---	4.6	1.5	2.7	3.2	.4	1.7	4.1	.9	2.7
14	---	---	---	2.5	-.2	.7	2.4	-.2	.9	1.9	-.2	.7
15	---	---	---	1.6	-.2	.2	.1	-.2	-.1	1.5	-.2	.3
16	---	---	---	3.3	1.1	2.1	.0	-.2	-.1	.9	-.2	.3
17	---	---	---	3.4	.0	1.6	1.3	-.2	.5	1.6	.4	1.0
18	---	---	---	4.3	.6	2.1	2.1	-.2	.6	1.5	1.0	1.2
19	---	---	---	3.5	.0	1.5	3.0	-.1	1.5	2.4	1.0	1.7
20	---	---	---	4.1	.3	1.8	3.3	.7	1.9	3.3	1.8	2.4
21	---	---	---	4.6	.3	2.5	1.4	-.2	.0	3.3	.7	1.6
22	---	---	---	3.8	1.6	2.5	.0	-.2	-.1	1.8	-.2	.4
23	---	---	---	2.3	1.5	1.9	-.1	-.2	-.2	-.1	-.2	-.1
24	---	---	---	4.1	1.6	2.7	-.2	-.2	-.2	1.0	-.2	.3
25	---	---	---	2.4	-.1	1.3	-.2	-.2	-.2	2.1	.5	1.2
26	---	---	---	4.8	1.8	3.3	2.2	-.2	.8	2.4	.0	.9
27	---	---	---	4.6	1.1	3.3	2.3	1.0	1.7	1.8	-.2	.6
28	---	---	---	2.8	.7	1.9	2.1	-.2	1.1	2.4	1.3	1.8
29	---	---	---	4.3	1.4	2.6	.2	-.2	-.1	3.8	1.6	2.5
30	---	---	---	3.6	.3	2.1	1.5	.2	1.1	3.3	1.9	2.6
31	---	---	---	---	---	---	1.8	-.2	.8	3.5	1.6	2.7
MONTH	---	---	---	---	---	---	5.1	-.2	1.2	4.1	-.2	1.7

e Estimated

CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.8	0.4	1.8	5.5	4.6	5.0	13.9	7.5	10.0	16.7	11.0	13.9
2	4.1	.3	2.1	7.5	4.6	5.8	8.2	6.8	7.5	14.5	12.1	13.2
3	5.0	2.1	3.3	6.0	4.8	5.3	10.9	6.7	8.6	16.4	12.2	13.6
4	3.6	2.3	2.9	7.2	3.4	5.3	8.1	6.1	7.0	16.7	11.5	13.5
5	2.4	1.2	1.6	5.5	3.8	4.8	7.1	5.1	6.0	16.2	12.1	14.1
6	3.5	.0	1.4	6.9	2.7	4.5	9.4	5.0	7.0	14.7	12.8	13.6
7	3.1	-.2	1.2	6.1	4.2	5.1	13.8	4.6	8.5	14.2	13.1	13.6
8	3.4	.7	1.6	6.6	3.0	4.8	13.7	5.3	8.9	15.0	12.7	13.7
9	4.0	-.2	1.5	8.7	3.4	5.1	11.6	7.5	9.0	13.5	11.9	12.5
10	4.6	.2	2.1	9.1	4.7	7.5	12.3	5.9	8.5	12.0	10.5	11.1
11	6.1	2.2	3.7	5.5	1.7	3.5	13.5	4.4	8.3	10.7	9.7	10.1
12	3.9	2.3	3.1	3.6	.4	1.7	14.4	4.7	8.6	14.0	9.3	11.3
13	4.8	1.7	3.0	4.7	-.2	1.8	15.1	4.7	9.1	13.3	9.3	11.0
14	2.9	-.2	.9	3.3	1.5	2.5	15.5	5.7	9.8	14.5	8.9	11.5
15	.9	-.2	.2	4.7	1.6	3.1	13.4	6.7	9.5	16.4	9.4	12.9
16	2.8	-.2	1.1	5.3	1.4	3.2	14.8	8.2	11.1	17.0	12.1	14.4
17	3.6	1.2	2.3	6.8	.8	3.4	14.4	11.3	12.4	14.6	11.8	13.2
18	1.9	.5	1.2	5.3	2.3	3.8	15.1	8.9	11.7	17.6	12.0	14.7
19	2.6	1.7	2.1	4.2	2.6	3.0	12.6	9.3	10.8	17.3	12.8	14.8
20	4.8	1.7	3.2	3.9	2.6	3.3	10.6	8.2	9.6	16.9	12.2	14.7
21	5.0	2.8	3.8	3.3	1.3	2.3	15.6	6.3	10.4	17.9	13.4	15.5
22	5.8	2.0	3.7	2.2	-.2	1.2	16.8	7.1	11.5	16.1	12.1	14.0
23	4.0	1.7	2.9	5.6	1.3	3.1	11.0	8.1	9.8	16.2	10.9	13.5
24	3.2	1.3	2.3	7.3	1.3	3.9	10.5	7.6	8.8	17.0	11.5	14.2
25	4.5	2.4	3.3	7.8	1.7	4.5	11.4	7.9	9.5	15.4	11.8	13.6
26	6.2	2.7	4.1	8.8	3.1	6.0	10.5	6.0	8.4	16.7	12.1	14.5
27	6.6	3.0	4.7	12.7	6.3	9.4	14.4	7.0	9.9	17.1	11.9	14.5
28	7.3	3.3	5.2	15.5	9.0	11.6	12.4	6.3	9.3	18.6	12.8	15.6
29	---	---	---	14.5	9.8	11.9	17.0	6.2	11.2	20.0	14.8	17.3
30	---	---	---	15.9	8.1	12.0	18.5	10.5	13.8	20.0	15.3	17.3
31	---	---	---	19.1	11.4	14.7	---	---	---	18.7	14.0	15.6
MONTH	7.3	-.2	2.5	19.1	-.2	5.3	18.5	4.4	9.5	20.0	8.9	13.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.2	15.1	16.8	19.7	16.8	17.6	19.4	15.0	17.1	19.9	15.0	17.1
2	16.4	12.5	14.7	18.5	15.6	17.1	20.2	15.0	17.4	20.7	15.7	17.4
3	16.0	12.6	14.6	19.1	15.6	17.5	21.0	16.0	18.2	20.3	15.6	17.7
4	14.0	10.8	12.4	19.1	16.4	17.9	20.1	16.9	18.2	---	---	---
5	15.2	10.8	12.9	18.6	16.9	17.7	20.6	16.5	18.4	---	---	---
6	14.6	11.5	13.3	18.5	15.4	17.0	21.1	17.9	19.4	---	---	---
7	16.3	12.3	13.4	18.3	15.9	17.2	21.0	19.0	19.6	---	---	---
8	13.9	12.2	12.8	18.2	16.1	17.1	22.0	17.7	19.5	---	---	---
9	15.5	11.7	13.6	18.4	15.2	16.9	22.4	17.5	19.7	---	---	---
10	17.4	12.7	15.0	19.0	16.4	17.5	23.1	18.9	20.7	---	---	---
11	16.4	13.1	14.7	17.6	14.6	16.3	22.1	20.2	20.8	---	---	---
12	14.7	13.0	14.0	18.0	14.3	16.2	20.8	16.7	18.4	---	---	---
13	17.0	14.1	15.8	19.8	15.1	17.3	19.4	15.7	17.2	---	---	---
14	16.3	15.4	15.9	21.3	16.7	18.9	20.1	16.0	18.0	---	---	---
15	19.1	15.3	16.6	22.1	17.6	19.7	21.2	17.4	19.0	---	---	---
16	16.8	15.5	15.8	22.1	18.8	20.3	22.4	18.4	20.1	21.4	18.8	20.2
17	15.9	14.9	15.4	21.8	19.0	20.4	23.0	18.8	20.2	19.3	15.4	17.2
18	17.3	14.8	16.0	22.3	18.5	20.1	21.8	18.4	19.8	18.6	15.1	16.4
19	17.2	15.1	16.2	21.1	16.1	18.5	18.5	15.5	17.0	19.5	14.8	16.7
20	17.1	15.4	16.1	21.1	18.5	19.5	18.6	13.4	15.8	20.3	16.4	18.1
21	17.4	15.6	16.3	22.1	18.0	20.0	18.9	15.8	17.1	20.6	18.1	19.3
22	16.8	15.1	15.9	23.4	19.1	20.9	20.4	15.4	17.6	20.6	17.3	19.3
23	16.4	15.4	15.9	23.6	19.6	21.0	19.5	16.6	18.1	17.3	12.8	15.1
24	18.8	15.8	17.2	21.0	18.3	19.9	22.9	18.8	20.6	13.7	9.8	11.8
25	19.1	16.9	18.0	19.4	16.1	17.8	22.2	19.6	20.8	14.8	11.4	13.1
26	19.6	17.6	18.6	19.3	16.2	17.6	21.5	19.6	20.6	18.0	14.4	15.9
27	20.4	16.3	17.9	20.6	15.8	18.0	22.6	19.0	20.3	20.0	16.6	18.2
28	17.0	14.6	15.9	21.4	17.8	19.4	22.4	17.8	19.8	19.8	17.2	18.5
29	16.9	15.2	16.1	25.1	19.3	20.8	19.8	18.3	19.0	17.4	14.0	15.7
30	18.8	16.3	17.3	20.4	17.0	18.7	21.3	18.0	19.2	16.5	13.9	15.2
31	---	---	---	19.0	17.1	18.2	19.0	17.0	17.9	---	---	---
MONTH	20.4	10.8	15.5	25.1	14.3	18.5	23.1	13.4	18.9	---	---	---

## CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.00	0.000	0.00	e3.0	25	0.20	1.1	29	0.08
2	e.00	.000	.00	e1.5	34	.14	.46	37	.05
3	e.03	43	.00	e.50	45	.06	.34	38	.04
4	e.02	46	.00	e.25	49	.03	e.40	40	.04
5	e.15	44	.02	e.15	52	.02	.36	38	.04
6	e.02	46	.00	e.10	53	.01	e.32	40	.04
7	e.00	.000	.00	e.12	54	.02	e.28	40	.03
8	e.00	.000	.00	e.50	40	.05	e.25	41	.03
9	e.00	.000	.00	e1.8	25	.12	e.22	39	.02
10	e.00	.000	.00	e.80	34	.07	e.22	40	.02
11	e.00	.000	.00	e.30	38	.03	e.22	40	.02
12	e.00	.000	.00	e.20	42	.02	e.19	40	.02
13	e.00	.000	.00	e.15	45	.02	e.19	41	.02
14	e.00	.000	.00	e.20	40	.02	.16	40	.02
15	e.00	.000	.00	e.30	40	.03	e.14	37	.01
16	e.00	.000	.00	e.20	50	.03	.19	35	.02
17	e.00	.000	.00	e.22	46	.03	.21	35	.02
18	e.00	.000	.00	e.20	48	.03	.20	37	.02
19	e.00	.000	.00	e.19	48	.03	.20	39	.02
20	e.00	.000	.00	e.16	49	.02	.19	42	.02
21	e.00	.000	.00	.21	46	.03	e.19	38	.02
22	e.00	.000	.00	1.2	31	.10	e.22	37	.02
23	e.00	.000	.00	.56	41	.06	e.22	38	.02
24	e.00	.000	.00	.40	42	.05	.26	33	.02
25	e.25	40	.03	.31	41	.03	3.8	31	.30
26	e.03	46	.00	.33	41	.04	.90	40	.09
27	e.70	26	.05	.44	41	.05	.34	46	.04
28	e.05	38	.00	.29	43	.03	.29	44	.03
29	e.03	46	.00	.26	43	.03	.36	37	.04
30	e.03	46	.00	.36	39	.03	1.7	28	.11
31	e.03	46	.00	---	---	---	e.55	34	.05
TOTAL	1.34	---	0.10	15.20	---	1.43	14.67	---	1.32

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.49	31	0.04	0.63	25	0.04	1.6	17	0.08
2	.41	32	.04	.60	25	.04	1.2	18	.06
3	.33	36	.03	.66	25	.04	1.0	19	.05
4	.51	36	.05	.69	25	.05	.93	20	.05
5	.61	35	.06	.65	31	.05	.88	20	.05
6	.80	32	.07	.58	30	.05	.80	21	.05
7	1.4	27	.09	.52	27	.04	.75	21	.04
8	2.4	18	.11	.49	27	.04	.78	21	.05
9	1.7	19	.09	.55	26	.04	4.9	12	.14
10	.96	22	.06	.46	27	.03	3.6	10	.09
11	.72	24	.05	.53	26	.04	1.6	13	.06
12	.58	25	.04	3.0	21	.16	1.2	15	.05
13	.63	26	.04	1.2	22	.07	.99	16	.04
14	.53	25	.04	.77	23	.05	1.0	17	.05
15	e.45	26	.03	e.55	23	.04	.97	18	.05
16	e.45	28	.03	.69	24	.04	.88	19	.05
17	.45	30	.04	.54	24	.04	.81	19	.04
18	.44	34	.04	4.9	14	.14	.81	20	.04
19	.44	37	.05	1.8	15	.08	3.4	15	.13
20	.44	36	.04	1.4	17	.06	2.0	14	.08
21	.42	32	.04	1.2	19	.06	1.3	20	.07
22	.55	30	.04	.95	20	.05	1.2	26	.09
23	.77	30	.07	.84	21	.05	1.2	22	.07
24	7.7	19	.43	4.4	13	.14	1.3	23	.08
25	1.9	22	.11	3.1	11	.09	1.2	23	.07
26	1.1	22	.06	1.8	15	.07	1.1	23	.07
27	e.86	21	.05	1.4	17	.06	1.1	24	.07
28	.72	23	.04	1.2	18	.06	.95	24	.06
29	.73	23	.05	---	---	---	.86	25	.06
30	.71	24	.05	---	---	---	.77	25	.05
31	.69	24	.05	---	---	---	.73	25	.05
TOTAL	30.89	---	2.03	36.10	---	1.72	41.81	---	1.99

e Estimated

CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	0.81	24	0.05	0.50	25	0.03	2.2	22	0.10
2	1.5	22	.09	1.5	21	.08	.54	25	.04
3	.86	24	.05	.94	23	.05	.85	23	.05
4	.73	24	.05	1.0	22	.06	.44	25	.03
5	.67	24	.04	2.1	19	.10	.36	27	.03
6	.63	24	.04	4.7	13	.15	.32	27	.02
7	.59	25	.04	2.8	13	.09	1.1	24	.05
8	.59	25	.04	1.7	15	.07	1.1	23	.07
9	.76	24	.05	1.3	16	.06	.67	23	.04
10	.84	25	.05	5.7	11	.16	.45	25	.03
11	.56	26	.04	4.4	11	.12	.36	26	.03
12	.50	27	.04	3.0	12	.09	.34	27	.03
13	.48	27	.04	1.9	14	.07	12	10	.12
14	.46	28	.04	1.5	15	.06	10	5.4	.14
15	.45	28	.03	1.3	16	.05	6.5	8.0	.13
16	.45	29	.03	1.0	18	.05	5.0	10	.14
17	.73	27	.05	1.0	19	.05	3.1	13	.10
18	.60	29	.05	.91	21	.05	2.2	14	.08
19	.46	29	.04	.77	22	.05	1.7	16	.07
20	1.7	23	.10	.69	23	.04	1.5	17	.07
21	.64	26	.05	.67	24	.04	1.3	17	.06
22	.53	26	.04	.60	25	.04	1.1	18	.05
23	1.3	23	.06	.52	25	.04	1.0	18	.05
24	2.1	19	.10	.46	26	.03	.92	19	.05
25	.87	21	.05	.43	26	.03	.79	19	.04
26	.70	21	.04	.42	27	.03	.91	19	.05
27	.65	22	.04	.37	27	.03	1.0	20	.05
28	.59	22	.04	.33	28	.03	.76	21	.04
29	.55	23	.03	.36	27	.03	.69	21	.04
30	.53	24	.03	.34	28	.03	2.6	18	.11
31	---	---	---	.69	25	.04	---	---	---
TOTAL	22.83	---	1.44	43.90	---	1.85	61.80	---	1.91

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	2.1	17	0.09	0.24	26	0.02	0.02	42	0.00
2	1.2	18	.06	.17	26	.01	.04	37	.00
3	.75	20	.04	.13	28	.01	.02	38	.00
4	.55	22	.03	.10	28	.01	.01	42	.00
5	.50	23	.03	.08	29	.01	.00	.000	.00
6	.44	23	.03	.08	31	.01	.00	.000	.00
7	.41	23	.03	.23	26	.01	.05	18	.00
8	.39	23	.02	.10	31	.01	.01	34	.00
9	.36	23	.02	.07	32	.01	.00	.000	.00
10	.33	24	.02	.05	31	.00	.00	.000	.00
11	.30	24	.02	.15	29	.01	.00	.000	.00
12	.28	25	.02	.17	28	.01	.00	.000	.00
13	.26	25	.02	.10	34	.01	.00	.000	.00
14	.23	26	.02	.07	35	.01	.00	.000	.00
15	.21	26	.01	.05	37	.00	.06	27	.00
16	.19	26	.01	.03	36	.00	.01	36	.00
17	.18	26	.01	1.1	25	.04	.00	.000	.00
18	.16	25	.01	.36	35	.03	.00	.000	.00
19	.12	26	.01	.19	31	.02	.00	.000	.00
20	.14	25	.01	.12	32	.01	.00	.000	.00
21	.13	26	.01	.09	33	.01	.00	.000	.00
22	.11	26	.01	.06	35	.01	.86	25	.06
23	2.0	22	.08	.05	36	.00	.22	36	.02
24	.57	25	.04	.18	28	.01	.08	38	.01
25	.29	24	.02	.05	38	.00	.05	40	.00
26	.23	25	.01	.09	32	.01	.03	42	.00
27	.19	26	.01	.04	39	.00	.04	38	.00
28	.16	27	.01	.03	38	.00	.01	42	.00
29	.27	23	.01	.04	34	.00	.01	42	.00
30	.18	24	.01	.03	38	.00	.01	29	.00
31	.53	21	.03	.05	35	.00	---	---	---
TOTAL	13.76	---	0.75	4.30	---	0.28	1.53	---	0.09
YEAR	288.13		14.91						

## CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e.00	0.000	0.00	e3.0	99	0.80	1.1	110	0.32
2	e.00	.000	.00	e1.5	124	.50	.46	133	.16
3	e.03	153	.01	e.50	158	.21	.34	137	.13
4	e.02	161	.01	e.25	170	.12	e.40	143	.16
5	e.15	155	.06	e.15	176	.07	.36	138	.13
6	e.02	161	.01	e.10	181	.05	e.32	143	.12
7	e.00	.000	.00	e.12	182	.06	e.28	143	.11
8	e.00	.000	.00	e.50	143	.19	e.25	145	.10
9	e.00	.000	.00	e1.8	98	.47	e.22	139	.08
10	e.00	.000	.00	e.80	126	.27	e.22	144	.09
11	e.00	.000	.00	e.30	139	.11	e.22	143	.09
12	e.00	.000	.00	e.20	150	.08	e.19	142	.07
13	e.00	.000	.00	e.15	156	.06	e.19	146	.08
14	e.00	.000	.00	e.20	142	.08	.16	142	.06
15	e.00	.000	.00	e.30	144	.12	e.14	133	.05
16	e.00	.000	.00	e.20	172	.09	.19	129	.07
17	e.00	.000	.00	e.22	161	.09	.21	130	.07
18	e.00	.000	.00	e.20	165	.09	.20	134	.07
19	e.00	.000	.00	e.19	166	.09	.20	140	.08
20	e.00	.000	.00	e.16	169	.07	.19	148	.08
21	e.00	.000	.00	.21	160	.09	e.19	137	.07
22	e.00	.000	.00	1.2	116	.36	e.22	134	.08
23	e.00	.000	.00	.56	147	.22	e.22	137	.08
24	e.00	.000	.00	.40	148	.16	.26	121	.09
25	e.25	144	.10	.31	146	.12	3.8	117	1.14
26	e.03	161	.01	.33	145	.13	.90	144	.33
27	e.70	102	.19	.44	145	.17	.34	159	.14
28	e.05	137	.02	.29	151	.12	.29	153	.12
29	e.03	161	.01	.26	152	.11	.36	135	.13
30	e.03	161	.01	.36	139	.13	1.7	106	.44
31	e.03	161	.01	---	---	---	e.55	126	.19
TOTAL	1.34	---	0.44	15.20	---	5.23	14.67	---	4.93

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.49	117	0.16	0.63	96	0.16	1.6	72	0.32
2	.41	119	.13	.60	97	.16	1.2	76	.24
3	.33	131	.12	.66	97	.17	1.0	78	.22
4	.51	132	.18	.69	97	.18	.93	81	.20
5	.61	130	.22	.65	116	.20	.88	82	.19
6	.80	121	.26	.58	114	.18	.80	84	.18
7	1.4	103	.34	.52	103	.14	.75	85	.17
8	2.4	73	.46	.49	104	.14	.78	86	.18
9	1.7	80	.36	.55	102	.15	4.9	54	.63
10	.96	89	.23	.46	103	.13	3.6	46	.42
11	.72	95	.18	.53	102	.14	1.6	59	.26
12	.58	97	.15	3.0	85	.67	1.2	64	.21
13	.63	101	.17	1.2	90	.28	.99	67	.18
14	.53	99	.14	.77	91	.19	1.0	72	.20
15	e.45	100	.12	e.55	92	.14	.97	76	.20
16	e.45	107	.13	.69	93	.17	.88	79	.19
17	.45	115	.14	.54	96	.14	.81	80	.17
18	.44	126	.15	4.9	60	.64	.81	81	.18
19	.44	135	.16	1.8	66	.32	3.4	64	.56
20	.44	130	.16	1.4	72	.26	2.0	63	.33
21	.42	120	.14	1.2	78	.24	1.3	82	.29
22	.55	113	.16	.95	82	.21	1.2	100	.33
23	.77	112	.28	.84	86	.19	1.2	88	.29
24	7.7	76	1.73	4.4	58	.62	1.3	90	.32
25	1.9	86	.43	3.1	52	.43	1.2	92	.29
26	1.1	87	.26	1.8	65	.31	1.1	92	.28
27	e.86	85	.20	1.4	70	.27	1.1	93	.27
28	.72	91	.18	1.2	74	.25	.95	96	.24
29	.73	91	.18	---	---	---	.86	97	.23
30	.71	94	.18	---	---	---	.77	97	.20
31	.69	95	.18	---	---	---	.73	99	.19
TOTAL	30.89	---	7.88	36.10	---	7.08	41.81	---	8.16

e Estimated

CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	0.81	95	0.21	0.50	97	0.13	2.2	87	0.43
2	1.5	89	.35	1.5	85	.32	.54	99	.14
3	.86	93	.22	.94	91	.22	.85	92	.20
4	.73	93	.18	1.0	87	.23	.44	99	.12
5	.67	94	.17	2.1	77	.41	.36	103	.10
6	.63	95	.16	4.7	56	.68	.32	105	.09
7	.59	99	.16	2.8	57	.42	1.1	93	.23
8	.59	97	.16	1.7	64	.29	1.1	92	.27
9	.76	96	.19	1.3	69	.25	.67	91	.16
10	.84	96	.22	5.7	49	.73	.45	96	.12
11	.56	102	.15	4.4	48	.56	.36	101	.10
12	.50	103	.14	3.0	53	.43	.34	104	.09
13	.48	105	.14	1.9	60	.31	12	45	.61
14	.46	107	.13	1.5	65	.26	10	28	.73
15	.45	108	.13	1.3	69	.23	6.5	39	.65
16	.45	109	.13	1.0	74	.21	5.0	47	.63
17	.73	104	.19	1.0	77	.21	3.1	56	.46
18	.60	109	.17	.91	84	.20	2.2	61	.37
19	.46	110	.14	.77	89	.18	1.7	67	.31
20	1.7	92	.38	.69	91	.17	1.5	71	.28
21	.64	101	.17	.67	95	.17	1.3	72	.25
22	.53	102	.15	.60	98	.16	1.1	74	.22
23	1.3	91	.26	.52	99	.14	1.0	76	.21
24	2.1	78	.43	.46	100	.12	.92	77	.19
25	.87	84	.20	.43	101	.12	.79	79	.17
26	.70	86	.16	.42	103	.12	.91	80	.20
27	.65	88	.15	.37	104	.10	1.0	82	.22
28	.59	90	.14	.33	107	.10	.76	84	.17
29	.55	91	.13	.36	103	.10	.69	86	.16
30	.53	93	.13	.34	106	.10	2.6	75	.47
31	---	---	---	.69	97	.15	---	---	---
TOTAL	22.83	---	5.64	43.90	---	7.82	61.80	---	8.35

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	2.1	70	0.38	0.24	100	0.06	0.02	149	0.01
2	1.2	75	.24	.17	102	.05	.04	134	.01
3	.75	83	.17	.13	106	.04	.02	138	.01
4	.55	88	.13	.10	107	.03	.01	149	.00
5	.50	90	.12	.08	111	.02	.00	.000	.00
6	.44	91	.11	.08	116	.02	.00	.000	.00
7	.41	92	.10	.23	99	.05	.05	73	.01
8	.39	93	.10	.10	118	.03	.01	126	.00
9	.36	93	.09	.07	118	.02	.00	.000	.00
10	.33	94	.09	.05	118	.02	.00	.000	.00
11	.30	94	.08	.15	111	.02	.00	.000	.00
12	.28	96	.07	.17	107	.05	.00	.000	.00
13	.26	97	.07	.10	125	.03	.00	.000	.00
14	.23	100	.06	.07	128	.02	.00	.000	.00
15	.21	102	.06	.05	133	.02	.06	105	.02
16	.19	99	.05	.03	132	.01	.01	130	.00
17	.18	99	.05	1.1	95	.15	.00	.000	.00
18	.16	99	.04	.36	130	.13	.00	.000	.00
19	.12	100	.03	.19	118	.06	.00	.000	.00
20	.14	99	.04	.12	121	.04	.00	.000	.00
21	.13	101	.04	.09	124	.03	.00	.000	.00
22	.11	101	.03	.06	128	.02	.86	99	.23
23	2.0	88	.32	.05	132	.02	.22	130	.08
24	.57	98	.15	.18	106	.04	.08	137	.03
25	.29	96	.08	.05	137	.02	.05	143	.02
26	.23	96	.06	.09	119	.03	.03	149	.01
27	.19	99	.05	.04	140	.01	.04	137	.01
28	.16	103	.04	.03	137	.01	.01	149	.01
29	.27	90	.06	.04	125	.01	.01	149	.00
30	.18	94	.05	.03	136	.01	.01	112	.00
31	.53	84	.10	.05	129	.01	---	---	---
TOTAL	13.76	---	3.06	4.30	---	1.08	1.53	---	0.45
YEAR	288.13		60.12						



## CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.00	0.00	0.00	e3.0	190	1.50	1.1	210	0.61
2	e.00	.00	.00	e1.5	240	.97	.46	260	.32
3	e.03	300	.02	e.50	310	.42	.34	270	.25
4	e.02	320	.02	e.25	340	.23	e.40	280	.31
5	e.15	310	.13	e.15	350	.14	.36	270	.26
6	e.02	320	.02	e.10	370	.10	e.32	280	.24
7	e.00	.00	.00	e.12	370	.12	e.28	280	.21
8	e.00	.00	.00	e.50	280	.38	e.25	290	.19
9	e.00	.00	.00	e1.8	180	.90	e.22	270	.16
10	e.00	.00	.00	e.80	240	.52	e.22	280	.17
11	e.00	.00	.00	e.30	270	.22	e.22	280	.17
12	e.00	.00	.00	e.20	300	.16	e.19	280	.14
13	e.00	.00	.00	e.15	310	.13	e.19	290	.15
14	e.00	.00	.00	e.20	280	.15	.16	280	.12
15	e.00	.00	.00	e.30	280	.23	e.14	260	.10
16	e.00	.00	.00	e.20	350	.19	.19	250	.13
17	e.00	.00	.00	e.22	320	.19	.21	250	.14
18	e.00	.00	.00	e.20	330	.18	.20	260	.14
19	e.00	.00	.00	e.19	330	.17	.20	280	.15
20	e.00	.00	.00	e.16	340	.15	.19	290	.15
21	e.00	.00	.00	.21	320	.17	e.19	270	.14
22	e.00	.00	.00	1.2	220	.69	e.22	260	.16
23	e.00	.00	.00	.56	290	.44	e.22	270	.16
24	e.00	.00	.00	.40	290	.32	.26	230	.17
25	e.25	280	.19	.31	290	.24	3.8	230	2.18
26	e.03	320	.03	.33	280	.25	.90	280	.64
27	e.70	190	.36	.44	280	.33	.34	320	.29
28	e.05	270	.04	.29	300	.24	.29	300	.24
29	e.03	320	.03	.26	300	.21	.36	260	.25
30	e.03	320	.03	.36	270	.24	1.7	200	.83
31	e.03	320	.03	---	---	---	e.55	240	.36
TOTAL	1.34	---	0.90	15.20	---	10.18	14.67	---	9.53

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.49	220	0.30	0.63	180	0.31	1.6	130	0.57
2	.41	230	.25	.60	180	.30	1.2	140	.45
3	.33	260	.23	.66	180	.32	1.0	140	.40
4	.51	260	.36	.69	180	.34	.93	150	.37
5	.61	250	.42	.65	220	.39	.88	150	.36
6	.80	230	.49	.58	220	.34	.80	160	.34
7	1.4	190	.63	.52	190	.27	.75	160	.32
8	2.4	130	.84	.49	200	.26	.78	160	.34
9	1.7	150	.65	.55	190	.28	4.9	94	1.09
10	.96	170	.43	.46	190	.24	3.6	80	.72
11	.72	180	.34	.53	190	.27	1.6	100	.45
12	.58	180	.29	3.0	160	1.22	1.2	110	.37
13	.63	190	.32	1.2	170	.52	.99	120	.32
14	.53	190	.27	.77	170	.36	1.0	130	.36
15	e.45	190	.23	e.55	170	.26	.97	140	.36
16	e.45	200	.25	.69	170	.32	.88	150	.34
17	.45	220	.27	.54	180	.26	.81	150	.32
18	.44	250	.29	4.9	110	1.11	.81	150	.33
19	.44	260	.31	1.8	120	.58	3.4	110	1.00
20	.44	250	.30	1.4	130	.48	2.0	110	.59
21	.42	230	.26	1.2	140	.45	1.3	150	.54
22	.55	220	.31	.95	150	.39	1.2	190	.63
23	.77	210	.53	.84	160	.36	1.2	160	.54
24	7.7	140	3.22	4.4	100	1.08	1.3	170	.59
25	1.9	160	.79	3.1	90	.75	1.2	170	.55
26	1.1	160	.48	1.8	120	.55	1.1	170	.52
27	e.86	160	.36	1.4	130	.49	1.1	170	.51
28	.72	170	.33	1.2	130	.45	.95	180	.46
29	.73	170	.33	---	---	---	.86	180	.42
30	.71	180	.34	---	---	---	.77	180	.38
31	.69	180	.33	---	---	---	.73	190	.37
TOTAL	30.89	---	14.75	36.10	---	12.95	41.81	---	14.91

e Estimated

CHARLES RIVER BASIN

01104410 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 1, NEAR LEXINGTON, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	0.81	180	0.38	0.50	180	0.24	2.2	160	0.79
2	1.5	160	.64	1.5	160	.59	.54	190	.27
3	.86	170	.40	.94	170	.41	.85	170	.37
4	.73	170	.34	1.0	160	.43	.44	190	.22
5	.67	180	.32	2.1	140	.75	.36	190	.19
6	.63	180	.31	4.7	98	1.19	.32	200	.17
7	.59	190	.29	2.8	100	.74	1.1	170	.42
8	.59	180	.29	1.7	110	.51	1.1	170	.51
9	.76	180	.36	1.3	120	.44	.67	170	.30
10	.84	180	.40	5.7	84	1.26	.45	180	.22
11	.56	190	.29	4.4	84	.96	.36	190	.18
12	.50	190	.26	3.0	92	.74	.34	200	.18
13	.48	200	.26	1.9	110	.55	.12	79	.98
14	.46	200	.25	1.5	120	.47	10	45	1.17
15	.45	200	.25	1.3	120	.42	6.5	65	1.08
16	.45	210	.25	1.0	130	.38	5.0	82	1.08
17	.73	200	.37	1.0	140	.38	3.1	98	.81
18	.60	210	.33	.91	150	.38	2.2	110	.65
19	.46	210	.26	.77	160	.34	1.7	120	.56
20	1.7	170	.71	.69	170	.32	1.5	130	.50
21	.64	190	.33	.67	180	.32	1.3	130	.45
22	.53	190	.28	.60	190	.30	1.1	130	.41
23	1.3	170	.47	.52	190	.26	1.0	140	.38
24	2.1	140	.79	.46	190	.23	.92	140	.35
25	.87	160	.37	.43	190	.22	.79	150	.31
26	.70	160	.30	.42	190	.22	.91	150	.36
27	.65	160	.29	.37	200	.20	1.0	150	.40
28	.59	170	.26	.33	200	.18	.76	160	.32
29	.55	170	.25	.36	200	.19	.69	160	.30
30	.53	170	.25	.34	200	.18	2.6	140	.84
31	---	---	---	.69	180	.27	---	---	---
TOTAL	22.83	---	10.55	43.90	---	14.07	61.80	---	14.77

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	2.1	130	0.69	0.24	190	0.12	0.02	290	0.02
2	1.2	140	.43	.17	190	.09	.04	260	.02
3	.75	150	.31	.13	200	.07	.02	270	.01
4	.55	160	.24	.10	200	.05	.01	290	.00
5	.50	170	.23	.08	210	.05	.00	.00	.00
6	.44	170	.20	.08	220	.05	.00	.00	.00
7	.41	170	.19	.23	190	.09	.05	130	.01
8	.39	170	.18	.10	230	.06	.01	240	.01
9	.36	170	.17	.07	230	.04	.00	.00	.00
10	.33	180	.16	.05	230	.03	.00	.00	.00
11	.30	180	.14	.15	210	.04	.00	.00	.00
12	.28	180	.14	.17	200	.09	.00	.00	.00
13	.26	180	.13	.10	240	.06	.00	.00	.00
14	.23	190	.12	.07	250	.05	.00	.00	.00
15	.21	190	.11	.05	260	.03	.06	200	.03
16	.19	190	.09	.03	260	.02	.01	250	.01
17	.18	190	.09	1.1	180	.27	.00	.00	.00
18	.16	190	.08	.36	250	.24	.00	.00	.00
19	.12	190	.06	.19	230	.12	.00	.00	.00
20	.14	190	.07	.12	230	.08	.00	.00	.00
21	.13	190	.07	.09	240	.05	.00	.00	.00
22	.11	190	.06	.06	250	.04	.86	190	.43
23	2.0	160	.57	.05	260	.03	.22	250	.15
24	.57	180	.28	.18	200	.08	.08	270	.06
25	.29	180	.14	.05	270	.03	.05	280	.04
26	.23	180	.11	.09	230	.05	.03	290	.02
27	.19	190	.09	.04	270	.03	.04	270	.03
28	.16	190	.08	.03	270	.02	.01	290	.01
29	.27	170	.11	.04	240	.03	.01	290	.00
30	.18	180	.09	.03	270	.02	.01	210	.00
31	.53	160	.19	.05	250	.03	---	---	---
TOTAL	13.76	---	5.62	4.30	---	2.06	1.53	---	0.85
YEAR	288.13	---	111.14						



01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

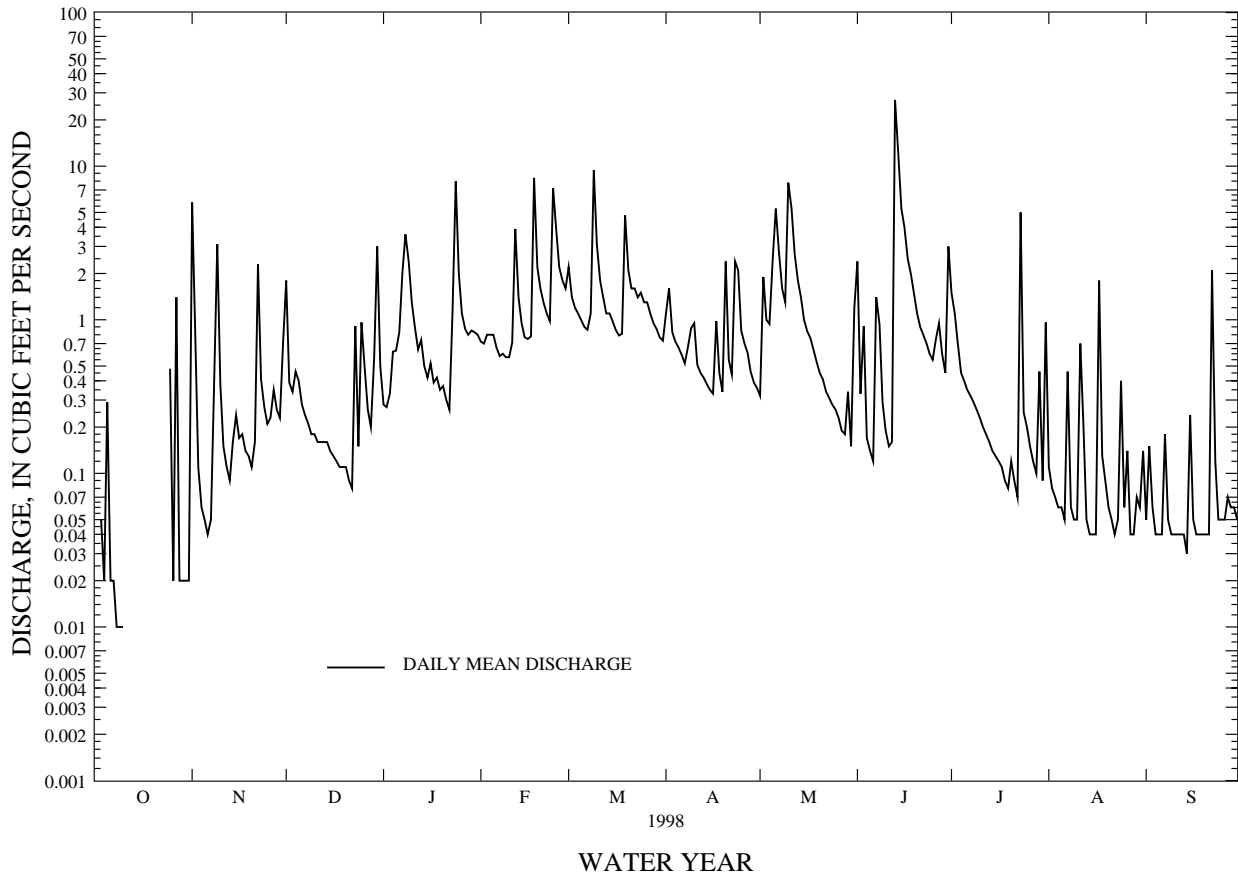
SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	331.03	
ANNUAL MEAN	.91	
HIGHEST DAILY MEAN	27	Jun 13
LOWEST DAILY MEAN	.00	Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 11
INSTANTANEOUS PEAK FLOW	140	Jun 13
INSTANTANEOUS PEAK STAGE	3.09	Jun 13
INSTANTANEOUS LOW FLOW	.00	Oct 1
ANNUAL RUNOFF (CFSM)	2.21	
ANNUAL RUNOFF (INCHES)	30.03	
10 PERCENT EXCEEDS	2.0	
50 PERCENT EXCEEDS	.38	
90 PERCENT EXCEEDS	.04	

e Estimated

CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2,  
NEAR LEXINGTON, MA 01104415



CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to September 1998.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1997 to September 1998.

WATER TEMPERATURE: October 1997 to September 1998.

CALCIUM CONCENTRATION: October 1997 to September 1998.

CALCIUM LOAD: October 1997 to September 1998.

SODIUM CONCENTRATION: October 1997 to September 1998.

SODIUM LOAD: October 1997 to September 1998.

CHLORIDE CONCENTRATION: October 1997 to September 1998.

CHLORIDE LOAD: October 1997 to September 1998.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

REMARKS.--Records good, except those for estimated daily specific conductances, which are poor. Calcium, sodium, and chloride concentrations and loads records are good, except those for which have estimated daily discharge and/or specific conductance.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 26,800 µS/cm, Mar. 22; minimum, 42 µS/cm, June 13.

WATER TEMPERATURE: Maximum recorded, 24.3°C, July 29; minimum, -0.8°C, Jan. 23.

CALCIUM CONCENTRATION: Maximum daily mean, 230 mg/L, Nov. 15; minimum daily mean, 5.2 mg/L, Oct. 27.

CALCIUM LOAD: Maximum daily, 0.98 tons, Mar. 22; minimum daily, 0.00 tons, many days.

SODIUM CONCENTRATION: Maximum daily mean, 2,190 mg/L, Nov. 15; minimum daily mean, 18 mg/L, Oct. 27.

SODIUM LOAD: Maximum daily, 9.53 tons, Mar. 22; minimum daily, 0.00 tons, several days.

CHLORIDE CONCENTRATION: Maximum daily mean, 3,800 mg/L, Nov. 15 and March 22; minimum daily mean, 32 mg/L, Oct. 27.

CHLORIDE LOAD: Maximum daily, 16.8 tons, Mar. 22; minimum daily, 0.00 tons, several days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 OF (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT- SATUR- ATION) (00301)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
27...	1230	1.0	189	6.4	--	8.8	744	9.5	84	--
NOV										
18...	1230	8.9	4400	6.5	--	4.9	765	10.1	80	--
19...	1355	.19	3280	6.7	4.3	4.7	772	--	--	83
22...	1030	3.3	670	6.5	--	4.1	755	11.4	88	20
DEC										
16...	1015	.13	2110	6.6	-1.5	1.5	757	--	--	55
16...	1100	.18	2160	6.7	--	1.8	759	11.8	86	--
24...	1200	.13	8200	6.7	--	1.1	772	--	--	210
JAN										
13...	1215	.66	1250	6.8	--	5.0	756	10.9	87	41
16...	1000	.66	11700	6.6	--	1.5	756	11.6	88	220
16...	1140	.80	11500	6.7	--	2.1	757	11.1	85	230
16...	1340	.66	13300	6.6	--	2.1	755	13.2	102	250
16...	1440	.53	12200	6.7	--	2.1	756	10.9	81	230
17...	1440	.49	2820	6.7	-1.6	2.8	752	--	--	21
23...	1345	.42	9400	6.7	--	.8	764	--	--	230
23...	1530	.49	17700	6.7	.0	.4	764	--	--	340
24...	0845	9.9	865	7.4	1.0	.6	748	--	--	16
FEB										
12...	0900	4.3	808	7.0	9.0	4.7	740	--	--	17
MAR										
17...	1145	.66	1410	5.9	4.4	5.0	772	12.0	93	40
22...	1015	1.7	19600	--	-1.9	1.6	741	--	--	290
22...	1205	1.6	25400	6.4	-.5	2.0	741	--	--	330
22...	1450	1.8	21000	6.5	.5	2.9	741	--	--	260
23...	0945	.95	3040	6.7	3.6	4.1	752	--	--	54
APR										
13...	1150	.36	1650	6.4	20.8	9.8	764	--	--	46
MAY										
12...	1100	2.8	528	6.7	12.0	11.4	761	9.4	87	--
18...	1255	1.5	1380	6.7	23.1	16.1	751	--	--	38
JUN										
04...	1410	.22	1660	6.4	15.9	13.8	744	--	--	45
JUL										
07...	1200	.36	1600	6.9	24.8	16.6	759	7.8	81	43
28...	1215	.25	2080	6.9	26.8	18.3	752	--	--	56
AUG										
11...	1040	.06	1920	6.8	--	17.9	750	7.0	76	--
SEP										
16...	1200	.04	1190	7.0	24.6	19.6	757	6.6	73	33

CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
27...	--	--	--	--	--	--	--	--	--	0.025
NOV										
18...	--	--	--	35	30	--	--	--	--	.011
19...	--	510	--	--	--	940	--	--	--	--
22...	1.9	122	2.8	--	13	230	<0.10	3.3	436	.014
DEC										
16...	--	314	--	--	--	590	--	--	--	--
16...	--	--	--	--	26	--	--	--	--	<.010
24...	9.2	1320	7.2	--	40	2600	<.10	8.3	4480	--
JAN										
13...	5.0	204	3.4	26	23	340	<.10	11	706	<.010
16...	11	2180	7.3	--	38	3800	<.10	9.7	6450	.024
16...	11	2180	7.1	--	37	3500	<.10	10	6100	.025
16...	11	2500	7.7	--	42	4400	<.10	9.7	7340	.023
16...	11	2270	30	--	40	3900	<.10	9.7	6820	.018
17...	2.0	166	1.3	--	18	690	<.10	3.9	1580	--
23...	13	1690	37	--	47	3000	<.10	11	5440	.028
23...	24	3440	12	--	79	6100	<.10	9.8	10600	.040
24...	1.8	148	2.1	--	8.4	250	<.10	3.4	461	.013
FEB										
12...	--	135	--	--	--	220	--	--	--	--
MAR										
17...	4.8	204	3.2	--	21	360	<.10	11	692	<.010
22...	39	3960	18	--	130	6800	<.50	8.6	11500	.011
22...	51	5220	23	--	180	9000	<.50	7.9	15500	.014
22...	39	4160	18	--	140	7200	<.50	7.4	12600	.013
23...	7.1	524	4.6	--	30	900	<.10	9.6	1670	--
APR										
13...	--	262	--	--	--	460	--	--	--	.017
MAY										
12...	--	--	--	--	17	--	--	--	--	.012
18...	--	220	--	--	--	390	--	--	--	--
JUN										
04...	--	258	--	--	--	460	--	--	--	--
JUL										
07...	5.3	236	3.5	--	19	420	<.10	13	840	.015
28...	--	334	--	--	--	600	--	--	--	--
AUG										
11...	--	--	--	--	20	--	--	--	--	.012
SEP										
16...	4.3	175	4.6	--	28	300	<.10	7.9	606	.033

## CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
27...	0.341	<0.015	0.79	0.37	0.084	0.031	0.026	--	--	6.5
NOV										
18...	.898	.165	.35	.30	<.010	<.010	.015	290	760	2.6
19...	--	--	--	--	--	--	--	--	--	--
22...	.471	<.020	.35	.35	.028	<.010	.021	140	87	--
DEC										
16...	--	--	--	--	--	--	--	--	--	--
16...	1.35	.092	.26	.25	<.010	.010	<.010	210	406	--
24...	--	--	--	--	--	--	--	440	531	--
JAN										
13...	1.72	<.020	.23	.17	<.010	<.010	.018	220	168	--
16...	1.47	.434	.65	.57	<.010	.012	.011	280	265	--
16...	1.60	.404	.58	.46	<.010	<.010	.013	370	307	--
16...	1.61	.449	.57	.48	<.010	<.010	.012	370	300	--
16...	1.52	.401	.53	.50	<.010	<.010	.012	400	338	--
17...	--	--	--	--	--	--	--	65	82	--
23...	1.45	.527	.67	.73	.019	<.010	.011	230	302	--
23...	1.38	.698	.71	.89	<.010	<.010	<.010	360	442	--
24...	.530	.037	.30	.22	.046	<.010	.017	96	56	--
FEB										
12...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	1.42	.060	.16	.23	<.010	<.010	.001	93	177	2.4
22...	1.29	.291	.40	.41	<.010	<.010	<.010	410	286	--
22...	1.23	.347	.17	.40	<.010	<.010	<.010	500	342	--
22...	1.22	.389	.46	.50	<.010	<.010	<.010	430	309	--
23...	--	--	--	--	--	--	--	340	213	--
APR										
13...	1.04	.044	.19	.19	<.010	<.010	.002	--	--	--
MAY										
12...	1.16	.079	.38	.34	<.010	<.010	.007	250	106	--
18...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
JUL										
07...	.841	.129	.27	.19	<.010	<.010	.004	29	330	--
28...	--	--	--	--	--	--	--	--	--	--
AUG										
11...	.988	.098	.16	.17	<.010	<.010	.001	<10	101	--
SEP										
16...	1.11	.118	.47	.34	.032	.011	.001	53	161	--

CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1340	111	635	1090	500	758	1570	1390	1490			
2	---	---	---	296	116	213	1440	1090	1270	1660	1570	1630			
3	e1670	e552	e1150	459	291	359	1570	1430	1490	1810	1540	1660			
4	1850	1370	1760	691	459	578	4410	1510	2620	2140	1060	1380			
5	1890	218	798	899	691	799	2450	1630	1960	1950	1180	1390			
6	1600	483	1020	1060	899	988	1890	1650	1760	2040	903	1120			
7	2050	1600	1820	1490	1060	1270	1760	1660	1710	1400	330	878			
8	2220	1850	2070	1520	1450	1500	1800	1630	1740	756	252	526			
9	2110	1830	1990	1450	89	444	1830	1740	1790	968	367	646			
10	2040	1820	1940	603	431	524	1890	1750	1800	983	752	873			
11	2100	1870	2020	938	603	777	1870	1770	1820	1090	971	1040			
12	---	---	---	1200	938	1080	1960	1720	1900	1290	1090	1200			
13	---	---	---	1400	1200	1300	1960	1720	1860	2120	1230	1440			
14	---	---	---	11200	1400	5590	1940	1810	1860	1420	1280	1340			
15	---	---	---	13000	9270	11800	2020	1790	1930	4270	1340	1530			
16	---	---	---	9270	7230	8080	2070	1790	1980	10800	1960	6720			
17	---	---	---	7230	5570	6330	2070	1760	1950	5880	2880	3540			
18	---	---	---	5570	4580	4990	2000	1810	1940	12100	2330	7320			
19	---	---	---	4670	3130	4060	2090	1770	2020	10500	3830	5680			
20	---	---	---	3420	2670	3040	2050	1740	1980	10500	3570	6640			
21	---	---	---	3030	2370	2750	2060	1790	1960	4620	2950	3370			
22	---	---	---	5840	834	1650	2160	1710	2010	2960	2390	2620			
23	---	---	---	2810	1230	1960	10100	1940	3890	22900	2300	8050			
24	---	---	---	1880	1760	1810	10400	6710	8400	6460	817	1490			
25	e774	e139	e288	2120	1800	1890	12500	4060	6520	13300	1310	4170			
26	491	139	265	2500	1740	1860	4060	2720	3270	2240	1670	1820			
27	526	51	140	3140	1780	2040	2720	2170	2360	1680	1490	1600			
28	697	186	397	1840	1760	1810	4190	2210	2690	1620	1530	1570			
29	1090	697	937	1900	1750	1830	4850	2080	2360	1710	1460	1570			
30	1300	1090	1210	2610	892	1840	2300	715	1020	1670	1460	1560			
31	1410	1300	1370	---	---	---	1480	1150	1360	1640	1480	1560			
MONTH	---	---	---	13000	89	2460	12500	500	2320	22900	252	2500			
DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1600	1460	1530	1270	605	805	4230	1400	1750	1460	1220	1420			
2	1560	1460	1520	951	831	908	1600	837	1220	1760	257	831			
3	1510	1310	1430	969	915	945	1370	1280	1330	2140	452	1030			
4	1370	1320	1350	1010	951	985	1420	1350	1390	1570	503	901			
5	9170	1350	5000	1050	968	1000	1460	1410	1430	1280	150	677			
6	6150	2310	3190	1060	1000	1030	1490	1440	1460	741	199	440			
7	2310	1950	2050	1070	1010	1050	1530	1460	1500	1080	352	687			
8	1980	1810	1890	1300	848	1070	2340	1130	1520	976	808	887			
9	1900	1710	1790	902	94	340	1840	895	1260	1110	879	958			
10	1800	1650	1720	724	178	552	1750	836	1160	1130	167	394			
11	2300	1370	1580	830	724	785	1450	1320	1390	759	199	530			
12	6020	807	1530	881	807	846	1520	1410	1470	878	494	742			
13	1180	929	1070	939	843	882	1590	1490	1540	963	851	915			
14	1300	1140	1220	1230	884	965	1600	1450	1570	1000	892	961			
15	1400	1130	1290	931	892	913	1620	1470	1590	1040	965	1000			
16	1470	1210	1350	960	907	931	1660	1520	1620	1120	1020	1060			
17	6420	1360	1570	978	921	946	1850	587	1380	1220	1060	1100			
18	9220	268	2160	1820	933	1130	1420	1040	1330	1380	1110	1230			
19	1070	875	945	1480	256	588	1480	1350	1440	1440	1350	1390			
20	1040	862	973	759	396	651	1460	351	812	1500	1410	1450			
21	1040	919	976	13000	720	3600	1240	1040	1170	1550	1470	1510			
22	1050	969	1010	26800	4750	11500	1320	1220	1280	1580	1510	1560			
23	1100	1030	1070	4750	2370	3480	1710	332	1100	1620	1520	1590			
24	1500	250	685	2720	1520	2010	934	409	697	1680	1560	1630			
25	842	427	626	1690	1370	1540	1070	866	981	1690	1590	1660			
26	968	747	869	1540	1320	1430	1130	1040	1090	1740	1580	1710			
27	977	904	949	1430	1320	1390	1210	1090	1160	1810	1670	1770			
28	1000	863	964	1490	1380	1420	1280	1160	1230	1860	1600	1810			
29	---	---	---	1500	1410	1470	1340	1230	1290	2710	913	1840			
30	---	---	---	1560	1460	1510	1410	1290	1360	1670	1140	1430			
31	---	---	---	1610	1500	1560	---	---	---	1750	269	1260			
MONTH	9220	250	1510	26800	94	1560	4230	332	1320	2710	150	1170			

e Estimated



## CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

SPECIFIC CONDUCTANCE ( $\mu\text{S}/\text{CM}$  AT  $25^\circ\text{C}$ ), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1310	224	871	794	289	508	1460	973	1220	1990	1840	1920
2	1540	1310	1440	774	462	657	1680	1430	1590	2030	853	1760
3	1540	389	1010	902	774	842	1840	1680	1780	2040	1590	1730
4	1660	1330	1500	976	900	931	1870	1720	1840	1830	1630	1740
5	1790	1370	1700	1010	969	995	1900	1810	1860	1890	1680	1800
6	1860	1500	1800	1060	959	1030	1960	1810	1890	1870	1700	1800
7	1870	216	1280	1110	1050	1090	1880	409	977	2370	702	1750
8	1310	458	803	1180	1090	1130	1530	1290	1420	1580	1350	1460
9	1300	580	1080	1170	1100	1150	1700	1520	1650	1800	1560	1720
10	1490	1300	1410	1250	1170	1210	1840	1680	1770	1850	1790	1830
11	1620	1470	1560	1300	1200	1250	1950	144	1730	1890	1730	1820
12	1770	1290	1600	1350	1250	1300	1280	155	919	1890	1690	1810
13	1670	42	386	1480	1300	1370	1490	1260	1420	1840	1770	1800
14	425	115	261	1560	1450	1500	1690	1490	1630	1840	1770	1810
15	542	191	411	1630	1490	1560	1800	1680	1750	2460	327	1650
16	542	253	439	1700	1560	1620	1840	1740	1780	1400	738	1090
17	658	520	579	1710	1610	1660	1780	82	1020	1780	1400	1640
18	727	622	678	1720	1660	1690	1330	762	1110	1780	1730	1760
19	767	727	743	1740	1640	1690	1540	1140	1350	1840	1670	1730
20	1050	763	787	1780	1140	1640	1580	1450	1540	1850	1670	1780
21	824	788	811	1800	1630	1720	1700	1580	1650	1790	1730	1760
22	848	803	821	1730	1620	1680	1780	1670	1720	1740	79	1110
23	915	847	870	1740	141	1180	1800	1680	1750	1350	506	977
24	1050	884	922	1100	719	948	1740	342	997	1640	1350	1510
25	1020	968	987	1250	1090	1160	1540	1290	1460	1760	1540	1660
26	1360	617	843	1330	1230	1270	1590	957	1460	1730	1630	1690
27	997	368	773	1420	1320	1380	1650	1570	1620	1700	1100	1500
28	964	696	867	2040	1400	1700	1800	1590	1710	1710	1660	1700
29	1040	964	999	2090	407	1560	1760	1560	1660	1710	1620	1670
30	1060	158	663	1430	881	1220	1870	1640	1770	1710	1610	1660
31	---	---	---	1490	160	757	2030	1080	1780	---	---	---
MONTH	1870	42	963	2090	141	1270	2030	82	1540	2460	79	1650

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	12.7	8.6	10.9	4.9	3.2	4.3	0.8	0.1	0.4
2	---	---	---	14.6	11.9	13.0	4.3	2.6	3.3	3.0	.8	2.0
3	---	---	---	13.2	10.6	11.7	5.2	2.8	3.9	5.3	2.6	3.9
4	13.2	11.0	12.0	11.7	9.4	10.6	6.5	4.2	5.4	5.3	3.8	4.4
5	15.3	12.5	13.9	10.3	8.1	9.3	6.7	5.2	5.9	5.3	3.7	4.4
6	16.6	12.8	14.6	8.7	6.6	7.9	5.3	3.4	4.5	6.8	4.9	5.8
7	15.3	11.7	13.7	8.9	7.4	8.4	5.1	2.9	4.0	5.9	3.2	4.7
8	13.2	8.7	11.4	9.2	8.5	8.7	5.2	3.0	4.1	4.7	2.8	3.9
9	14.2	10.9	12.6	9.0	8.4	8.7	4.3	2.0	3.1	4.7	4.0	4.4
10	16.9	13.3	14.9	10.1	8.9	9.3	4.3	2.8	3.6	5.7	3.8	4.6
11	14.3	9.9	12.3	9.4	6.4	8.4	4.0	1.8	3.1	5.7	3.5	4.3
12	---	---	---	6.9	4.9	5.9	4.4	1.7	3.2	3.8	2.3	3.0
13	---	---	---	5.7	4.0	4.9	4.4	2.4	3.4	5.6	2.7	4.2
14	---	---	---	4.5	-.2	1.8	3.8	1.0	2.6	3.3	1.4	2.3
15	---	---	---	3.9	.8	3.0	2.5	.4	1.4	2.8	.9	1.7
16	---	---	---	4.7	3.2	3.9	2.9	.6	1.8	2.3	.8	1.7
17	---	---	---	5.0	1.7	3.4	4.2	1.6	2.8	2.8	1.7	2.2
18	---	---	---	5.6	2.8	4.0	3.4	1.2	2.4	2.8	2.1	2.3
19	---	---	---	5.8	2.2	3.6	4.3	1.7	3.1	3.7	2.1	2.9
20	---	---	---	5.4	2.5	3.9	4.5	2.5	3.5	4.3	3.0	3.5
21	---	---	---	6.3	2.7	4.4	2.9	.7	1.6	3.9	2.1	2.8
22	---	---	---	6.1	3.8	4.5	1.8	.0	1.0	2.8	.5	1.6
23	---	---	---	4.5	4.0	4.3	1.8	-.4	.4	1.2	-.8	.5
24	---	---	---	5.8	3.8	4.8	1.5	-.2	.7	2.9	-.2	1.5
25	---	---	---	4.4	2.1	3.5	2.1	.3	1.3	3.8	2.3	2.9
26	9.0	5.0	7.0	6.5	3.8	5.2	3.5	1.6	2.6	4.1	1.8	2.7
27	9.3	6.9	8.5	6.7	3.3	5.4	3.5	2.2	2.9	3.4	.6	2.1
28	8.8	5.9	7.6	4.7	3.0	3.9	3.3	.4	2.3	3.9	2.8	3.3
29	8.0	4.9	6.5	5.6	3.5	4.6	2.4	.0	1.2	5.1	2.9	3.9
30	10.4	5.4	7.3	5.9	2.5	4.0	2.9	.7	2.2	4.7	3.4	4.0
31	10.9	5.1	7.8	---	---	---	3.0	.4	2.1	4.7	3.1	4.1
MONTH	---	---	---	14.6	-.2	6.2	6.7	-.4	2.8	6.8	-.8	3.1

CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4.9	2.0	3.2	6.2	5.5	5.9	12.3	7.4	9.1	14.9	10.2	12.7
2	5.3	1.8	3.4	8.1	5.5	6.6	8.4	7.2	7.7	14.0	12.2	13.0
3	6.2	3.4	4.5	6.6	5.3	5.9	10.3	6.9	8.4	16.1	11.6	13.2
4	4.8	3.6	4.1	7.6	4.4	6.0	8.0	6.3	7.1	16.0	11.3	13.2
5	3.6	2.3	2.8	6.1	4.8	5.5	7.2	5.4	6.2	16.6	11.8	14.1
6	4.4	1.3	2.5	7.4	3.8	5.3	8.9	5.6	7.2	15.1	12.3	13.5
7	3.9	.9	2.3	6.5	4.9	5.7	12.3	5.3	8.3	13.4	12.1	12.7
8	4.0	1.9	2.7	6.9	4.0	5.4	12.1	5.7	8.5	13.8	11.6	12.5
9	4.6	.8	2.4	10.9	4.3	6.6	10.9	7.8	8.9	12.0	11.3	11.5
10	5.1	1.3	3.0	9.2	4.9	7.6	11.6	6.2	8.4	11.8	10.6	11.2
11	6.4	3.1	4.5	6.4	2.8	4.3	12.0	5.0	8.1	11.0	10.1	10.4
12	5.9	4.3	5.1	4.7	1.5	2.9	12.5	5.2	8.3	13.8	9.8	11.2
13	6.2	3.0	4.5	5.7	.8	2.9	13.0	5.3	8.7	13.5	9.4	10.8
14	3.9	.4	2.2	4.6	2.9	3.8	13.2	6.2	9.3	14.7	9.1	11.3
15	2.2	.0	.8	5.8	3.1	4.3	11.9	7.0	9.1	16.0	9.2	12.3
16	3.8	.2	1.8	6.0	2.8	4.2	13.4	8.3	10.5	16.4	10.9	13.2
17	4.5	2.2	3.2	7.3	1.9	4.2	13.9	10.8	12.0	14.1	10.7	12.3
18	3.5	1.0	2.4	6.0	3.2	4.6	13.6	9.0	11.3	17.1	11.0	13.7
19	4.4	3.5	3.9	5.0	3.4	4.1	11.7	9.3	10.3	16.9	11.5	13.7
20	6.8	3.6	5.0	5.1	3.8	4.6	10.5	8.4	9.7	16.2	11.1	13.7
21	6.6	4.6	5.3	4.4	2.7	3.5	14.1	6.9	10.1	17.0	12.4	14.4
22	7.1	3.5	4.9	3.3	.7	2.3	14.8	7.4	10.8	16.0	11.2	13.2
23	5.2	3.0	4.1	6.3	2.8	4.2	10.6	8.4	9.6	16.0	10.5	13.0
24	4.4	1.8	3.5	7.9	2.5	4.7	10.8	8.1	9.1	16.7	11.1	13.6
25	5.9	4.0	4.7	8.3	2.6	5.1	11.0	8.1	9.4	14.7	11.3	13.2
26	7.3	4.1	5.3	9.1	3.8	6.3	10.3	6.6	8.5	16.4	11.8	13.9
27	7.7	4.3	5.7	12.0	6.3	9.0	13.3	7.3	9.7	16.5	11.6	13.9
28	7.9	4.3	6.0	13.6	7.9	10.3	11.3	6.7	9.0	17.7	12.4	14.9
29	---	---	---	12.6	8.8	10.5	15.1	6.6	10.5	19.7	14.1	16.5
30	---	---	---	14.1	7.2	10.6	16.3	9.9	12.5	18.9	15.2	16.9
31	---	---	---	16.4	10.1	12.8	---	---	---	19.1	13.8	15.6
MONTH	7.9	.0	3.7	16.4	.7	5.8	16.3	5.0	9.2	19.7	9.1	13.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.5	14.5	16.9	19.6	16.6	17.5	17.9	15.7	16.9	17.8	15.3	16.6
2	16.0	12.4	14.3	17.9	15.3	16.5	17.9	15.1	16.6	18.8	15.4	16.7
3	16.1	12.6	14.7	18.2	14.9	16.5	18.3	15.7	17.0	18.0	16.0	17.1
4	13.9	11.1	12.3	18.1	15.7	16.8	17.6	16.0	16.8	18.2	15.7	16.8
5	15.5	11.0	12.8	17.9	16.2	16.9	18.0	15.7	16.9	17.0	14.4	15.8
6	14.1	11.6	13.0	17.8	14.9	16.3	18.7	16.5	17.5	18.3	14.4	16.3
7	16.2	12.3	13.8	17.7	15.5	16.6	21.3	16.9	19.2	19.7	16.6	17.5
8	14.4	12.9	13.6	17.5	15.6	16.5	19.1	17.2	18.1	18.0	15.0	17.0
9	16.1	12.5	14.0	17.7	15.2	16.5	19.0	16.6	17.8	15.7	13.7	14.7
10	17.1	12.8	14.7	18.1	15.9	16.8	19.5	17.1	18.3	15.7	13.2	14.4
11	15.9	12.9	14.4	16.7	14.5	15.7	21.7	17.5	18.5	15.9	12.7	14.3
12	14.6	12.9	13.9	16.9	14.2	15.6	21.0	16.9	18.5	17.1	13.8	15.5
13	17.5	14.0	16.1	17.9	14.6	16.3	17.7	15.9	16.7	16.6	14.8	15.9
14	16.1	14.6	15.4	19.1	16.1	17.5	17.9	15.9	17.0	16.2	14.3	15.3
15	20.0	14.3	15.9	19.7	16.8	18.2	18.4	16.3	17.3	21.9	15.5	17.4
16	16.0	14.6	14.9	19.7	17.7	18.6	19.0	16.9	17.9	19.9	16.0	18.8
17	15.1	14.3	14.7	19.5	17.8	18.6	23.0	17.1	19.8	16.8	13.6	15.4
18	16.1	14.1	14.9	19.5	17.2	18.4	20.7	18.3	19.8	15.8	13.6	14.7
19	16.5	14.0	15.0	18.1	15.5	17.0	18.3	15.9	17.1	17.0	13.4	15.2
20	16.0	14.3	15.0	20.2	16.9	18.1	16.7	14.3	15.7	18.1	15.1	16.6
21	16.4	14.4	15.2	19.3	16.9	18.1	17.2	15.6	16.4	18.5	16.3	17.3
22	16.2	14.3	15.0	20.0	17.3	18.6	17.9	15.3	16.6	21.0	17.3	18.3
23	15.6	14.6	15.1	24.1	17.6	19.7	17.4	15.8	16.7	18.1	12.6	15.2
24	17.7	14.9	16.1	20.3	17.7	19.2	21.2	17.2	19.8	13.6	11.1	12.6
25	17.6	15.5	16.5	18.1	16.1	17.2	19.7	18.4	19.2	14.7	12.0	13.5
26	18.8	16.2	17.5	17.7	15.8	16.8	20.2	17.9	19.5	16.4	14.3	15.3
27	20.8	16.1	17.3	18.1	15.6	16.9	19.7	17.9	18.8	18.3	15.3	17.0
28	16.7	14.4	15.6	18.9	16.9	17.9	19.5	17.0	18.2	18.0	14.4	16.8
29	16.5	14.8	15.7	24.3	17.8	19.8	18.0	17.0	17.5	15.4	12.2	13.9
30	19.3	15.8	17.3	20.0	17.4	18.3	18.8	17.0	17.7	15.4	12.9	14.1
31	---	---	---	19.4	16.9	18.5	18.3	16.3	17.2	---	---	---
MONTH	20.8	11.0	15.1	24.3	14.2	17.5	23.0	14.3	17.8	21.9	11.1	15.9

## CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.00	0.000	0.00	5.8	19	0.11	1.8	23	0.10
2	e.00	.000	.00	.84	7.8	.02	.39	35	.04
3	e.05	32	.00	.11	12	.00	.34	40	.04
4	.02	46	.00	.06	18	.00	.46	64	.09
5	.29	22	.01	.05	24	.00	.40	50	.05
6	.02	29	.00	.04	28	.00	.28	46	.03
7	.02	47	.00	.05	35	.00	.24	45	.03
8	.01	53	.00	.36	40	.04	.21	46	.03
9	.01	51	.00	3.1	14	.08	.18	47	.02
10	.01	50	.00	.38	17	.02	.18	47	.02
11	.00	.000	.00	.15	23	.01	.16	47	.02
12	.00	.000	.00	.11	31	.01	.16	49	.02
13	.00	.000	.00	.09	36	.01	.16	48	.02
14	.00	.000	.00	.16	120	.06	.16	48	.02
15	.00	.000	.00	.24	230	.15	.14	50	.02
16	.00	.000	.00	.17	170	.08	.13	51	.02
17	.00	.000	.00	.18	140	.06	.12	50	.02
18	.00	.000	.00	.14	110	.04	.11	50	.01
19	.00	.000	.00	.13	93	.03	.11	52	.02
20	.00	.000	.00	.11	73	.02	.11	51	.01
21	.00	.000	.00	.16	67	.03	.09	50	.01
22	.00	.000	.00	2.3	42	.26	.08	52	.01
23	.00	.000	.00	.41	50	.05	.91	88	.21
24	.00	.000	.00	.27	47	.03	.15	170	.07
25	.48	9.8	.01	.21	49	.03	.96	140	.36
26	.02	9.3	.00	.23	48	.03	.48	77	.10
27	1.4	5.2	.02	.35	52	.05	.26	59	.04
28	.02	13	.00	.26	47	.03	.20	66	.04
29	.02	27	.00	.23	48	.03	.56	59	.12
30	.02	34	.00	.72	48	.09	3.0	29	.24
31	.02	37	.00	---	---	---	.50	37	.05
TOTAL	2.41	---	0.04	17.41	---	1.37	13.03	---	1.88

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.28	40	0.03	0.72	41	0.08	2.2	24	0.14
2	.27	43	.03	.70	41	.08	1.4	26	.10
3	.33	44	.04	.80	39	.08	1.2	27	.09
4	.62	38	.06	.80	37	.08	1.1	28	.08
5	.63	38	.06	.80	110	.24	.99	29	.08
6	.83	31	.07	.66	75	.13	.90	29	.07
7	2.0	25	.12	.58	52	.08	.86	30	.07
8	3.6	17	.14	.60	49	.08	1.1	30	.09
9	2.4	20	.13	.57	47	.07	9.4	11	.22
10	1.3	26	.09	.57	45	.07	3.1	17	.14
11	.90	30	.07	.71	42	.08	1.8	23	.11
12	.64	33	.06	3.9	40	.43	1.4	25	.09
13	.74	39	.08	1.4	30	.11	1.1	26	.08
14	.50	37	.05	.95	34	.09	1.1	28	.08
15	.42	41	.05	.77	35	.07	.98	27	.07
16	.52	140	.20	.75	37	.08	.86	27	.06
17	.39	82	.09	.78	41	.09	.79	27	.06
18	.42	150	.18	8.4	50	.66	.81	32	.07
19	.35	120	.12	2.2	27	.16	4.8	18	.20
20	.37	140	.14	1.6	28	.12	2.1	20	.11
21	.30	79	.06	1.3	28	.10	1.6	79	.37
22	.26	64	.05	1.1	29	.09	1.6	220	.98
23	1.1	160	.64	.98	30	.08	1.4	82	.31
24	8.0	39	.87	7.2	20	.34	1.5	51	.21
25	2.0	92	.50	3.9	19	.19	1.3	41	.14
26	1.1	47	.15	2.2	25	.15	1.3	39	.13
27	.87	43	.10	1.8	27	.13	1.1	38	.11
28	.80	42	.09	1.6	28	.12	.95	39	.10
29	.85	42	.10	---	---	---	.87	40	.09
30	.83	42	.09	---	---	---	.77	41	.09
31	.80	41	.09	---	---	---	.73	42	.08
TOTAL	34.42	---	4.55	48.34	---	4.08	51.11	---	4.62

e Estimated

CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	1.1	46	0.16	0.32	38	0.03	2.4	25	0.09
2	1.6	34	.15	1.9	24	.11	.33	39	.04
3	.83	36	.08	1.0	29	.07	.91	29	.06
4	.72	38	.07	.94	26	.07	.17	40	.02
5	.66	39	.07	2.5	20	.12	.14	45	.02
6	.59	39	.06	5.3	14	.18	.12	47	.01
7	.52	40	.06	2.8	21	.15	1.4	34	.07
8	.66	41	.07	1.6	26	.11	.94	24	.06
9	.88	35	.09	1.3	28	.09	.29	31	.02
10	.95	32	.08	7.8	13	.23	.19	38	.02
11	.51	38	.05	5.3	17	.20	.15	42	.02
12	.45	40	.05	2.7	22	.16	.16	42	.02
13	.42	41	.05	1.8	27	.13	27	12	.28
14	.38	42	.04	1.4	28	.10	12	9.2	.25
15	.35	42	.04	1.0	29	.08	5.3	13	.16
16	.33	43	.04	.84	30	.07	e4.0	14	.15
17	.98	37	.09	.76	31	.06	e2.5	18	.12
18	.45	36	.04	.64	34	.06	e2.0	21	.11
19	.34	39	.04	.53	38	.05	e1.5	22	.09
20	2.4	24	.14	.45	39	.05	e1.1	23	.07
21	.55	33	.05	.41	40	.04	e.90	24	.06
22	.44	35	.04	.34	42	.04	e.80	24	.05
23	2.4	31	.12	.31	42	.04	e.70	25	.05
24	2.1	21	.11	.28	43	.03	e.60	27	.04
25	.85	28	.06	.26	44	.03	e.55	28	.04
26	.70	31	.06	.23	45	.03	e.75	25	.05
27	.61	32	.05	.19	46	.02	e.95	23	.06
28	.46	34	.04	.18	47	.02	e.60	25	.04
29	.39	35	.04	.34	48	.04	e.45	29	.04
30	.36	37	.04	.15	39	.02	e3.0	20	.16
31	---	---	---	1.2	34	.07	---	---	---
TOTAL	23.98	---	2.08	44.77	---	2.50	71.90	---	2.27

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	e1.5	16	0.06	0.11	34	0.01	0.05	50	0.01
2	e1.1	20	.06	.08	42	.01	.15	46	.02
3	e.70	25	.05	.07	47	.01	.06	45	.01
4	e.45	27	.03	.06	48	.01	.04	46	.00
5	e.40	28	.03	.06	48	.01	.04	47	.00
6	e.35	29	.03	.05	49	.01	.04	47	.00
7	e.32	31	.03	.46	28	.03	.18	46	.02
8	e.29	32	.03	.06	38	.01	.05	39	.00
9	e.26	32	.02	.05	44	.01	.04	45	.00
10	e.23	34	.02	.05	46	.01	.04	48	.00
11	e.20	35	.02	.70	45	.03	.04	47	.00
12	e.18	36	.02	.21	27	.01	.04	47	.00
13	e.16	37	.02	.05	38	.00	.04	47	.00
14	e.14	40	.01	.04	43	.00	.03	47	.00
15	e.13	42	.01	.04	46	.00	.24	43	.02
16	e.12	43	.01	.04	47	.00	.05	31	.00
17	e.11	44	.01	1.8	28	.04	.04	44	.00
18	e.09	44	.01	.13	31	.01	.04	46	.00
19	e.08	44	.01	.09	37	.01	.04	45	.00
20	e.12	43	.01	.06	41	.01	.04	47	.00
21	e.09	45	.01	.05	44	.01	.04	46	.00
22	e.07	44	.01	.04	45	.00	2.1	30	.05
23	e5.0	32	.43	.05	46	.01	.12	28	.01
24	e.25	27	.02	.40	28	.03	.05	40	.00
25	e.20	32	.02	.06	39	.01	.05	44	.01
26	e.15	35	.01	.14	39	.01	.05	45	.01
27	e.12	38	.01	.04	43	.00	.07	40	.01
28	e.10	45	.01	.04	45	.00	.06	45	.01
29	.46	41	.04	.07	44	.01	.06	44	.01
30	.09	34	.01	.06	46	.01	.05	44	.01
31	.96	22	.04	.14	46	.01	---	---	---
TOTAL	14.42	---	1.10	5.30	---	0.33	3.94	---	0.20
YEAR	331.03		25.02						

e Estimated

## CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	OCTOBER			NOVEMBER			DECEMBER		
				MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.00	0.000	0.00	5.8	93	0.41	1.8	113	0.47			
2	e.00	.000	.00	.84	29	.06	.39	196	.20			
3	e.05	176	.03	.11	50	.01	.34	233	.21			
4	.02	279	.02	.06	84	.01	.46	430	.59			
5	.29	121	.06	.05	119	.01	.40	313	.34			
6	.02	156	.01	.04	149	.02	.28	280	.21			
7	.02	289	.01	.05	197	.03	.24	271	.17			
8	.01	332	.01	.36	234	.22	.21	275	.16			
9	.01	318	.01	3.1	64	.32	.18	284	.14			
10	.01	310	.01	.38	75	.07	.18	285	.14			
11	.00	.000	.00	.15	115	.05	.16	289	.13			
12	.00	.000	.00	.11	165	.05	.16	303	.13			
13	.00	.000	.00	.09	201	.05	.16	297	.13			
14	.00	.000	.00	.16	999	.49	.16	297	.13			
15	.00	.000	.00	.24	2190	1.43	.14	308	.12			
16	.00	.000	.00	.17	1450	.66	.13	316	.11			
17	.00	.000	.00	.18	1110	.53	.12	311	.10			
18	.00	.000	.00	.14	861	.33	.11	310	.09			
19	.00	.000	.00	.13	687	.25	.11	323	.10			
20	.00	.000	.00	.11	503	.15	.11	316	.09			
21	.00	.000	.00	.16	451	.20	.09	313	.08			
22	.00	.000	.00	2.3	263	1.64	.08	322	.07			
23	.00	.000	.00	.41	314	.34	.91	676	1.61			
24	.00	.000	.00	.27	287	.21	.15	1510	.62			
25	.48	40	.04	.21	302	.17	.96	1150	3.01			
26	.02	37	.00	.23	296	.19	.48	544	.69			
27	1.4	18	.05	.35	328	.33	.26	383	.27			
28	.02	56	.00	.26	287	.20	.20	441	.24			
29	.02	141	.01	.23	291	.18	.56	383	.82			
30	.02	186	.01	.72	291	.51	3.0	154	1.29			
31	.02	213	.01	---	---	---	.50	211	.28			
TOTAL	2.41	---	0.28	17.41	---	9.12	13.03	---	12.74			

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	JANUARY			FEBRUARY			MARCH		
				MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.28	233	0.18	0.72	240	0.46	2.2	119	0.69			
2	.27	256	.19	.70	238	.45	1.4	136	.51			
3	.33	261	.23	.80	223	.48	1.2	142	.46			
4	.62	215	.36	.80	209	.45	1.1	149	.42			
5	.63	215	.37	.80	873	1.89	.99	152	.41			
6	.83	170	.40	.66	528	.94	.90	156	.38			
7	2.0	132	.58	.58	328	.52	.86	159	.37			
8	3.6	76	.64	.60	302	.49	1.1	162	.48			
9	2.4	95	.61	.57	284	.44	9.4	47	.86			
10	1.3	131	.44	.57	273	.42	3.1	80	.62			
11	.90	157	.38	.71	247	.47	1.8	116	.57			
12	.64	184	.32	3.9	244	2.68	1.4	126	.47			
13	.74	225	.47	1.4	163	.60	1.1	132	.40			
14	.50	207	.28	.95	188	.48	1.1	146	.44			
15	.42	241	.28	.77	199	.41	.98	137	.36			
16	.52	1200	1.74	.75	210	.42	.86	140	.32			
17	.39	592	.63	.78	248	.58	.79	142	.30			
18	.42	1330	1.64	8.4	368	4.22	.81	174	.40			
19	.35	987	.93	2.2	142	.83	4.8	86	.91			
20	.37	1180	1.21	1.6	147	.65	2.1	95	.51			
21	.30	562	.46	1.3	147	.54	1.6	638	3.03			
22	.26	428	.30	1.1	154	.45	1.6	2140	9.53			
23	1.1	1480	6.27	.98	163	.43	1.4	583	2.24			
24	8.0	232	5.27	7.2	101	1.61	1.5	321	1.31			
25	2.0	718	3.90	3.9	92	.91	1.3	241	.85			
26	1.1	289	.90	2.2	130	.77	1.3	223	.75			
27	.87	252	.59	1.8	143	.69	1.1	215	.64			
28	.80	246	.53	1.6	145	.61	.95	222	.57			
29	.85	247	.57	---	---	---	.87	230	.54			
30	.83	245	.55	---	---	---	.77	236	.49			
31	.80	244	.53	---	---	---	.73	244	.48			
TOTAL	34.42	---	31.75	48.34	---	23.89	51.11	---	30.31			

e Estimated

CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	1.1	277	1.03	0.32	220	0.19	2.4	132	0.42
2	1.6	188	.81	1.9	124	.53	.33	225	.20
3	.83	205	.46	1.0	157	.38	.91	154	.32
4	.72	215	.42	.94	136	.34	.17	235	.10
5	.66	223	.40	2.5	100	.56	.14	269	.10
6	.59	228	.36	5.3	63	.75	.12	285	.09
7	.52	235	.33	2.8	101	.73	1.4	200	.32
8	.66	238	.44	1.6	133	.57	.94	120	.29
9	.88	195	.48	1.3	144	.49	.29	165	.12
10	.95	177	.44	7.8	56	.96	.19	220	.11
11	.51	216	.29	5.3	77	.90	.15	245	.10
12	.45	230	.28	2.7	110	.76	.16	251	.11
13	.42	241	.27	1.8	137	.66	27	57	.90
14	.38	246	.25	1.4	145	.53	12	36	.91
15	.35	249	.24	1.0	151	.43	5.3	58	.64
16	.33	254	.22	.84	161	.36	e4.0	62	.67
17	.98	214	.49	.76	168	.34	e2.5	84	.56
18	.45	206	.25	.64	189	.32	e2.0	99	.54
19	.34	224	.21	.53	217	.31	e1.5	110	.44
20	2.4	121	.66	.45	226	.28	e1.1	117	.35
21	.55	179	.26	.41	236	.26	e.90	121	.29
22	.44	197	.23	.34	244	.22	e.80	122	.26
23	2.4	169	.59	.31	250	.21	e.70	130	.25
24	2.1	103	.52	.28	257	.19	e.60	139	.22
25	.85	148	.34	.26	261	.18	e.55	149	.22
26	.70	166	.31	.23	270	.17	e.75	126	.25
27	.61	177	.29	.19	280	.15	e.95	115	.29
28	.46	189	.23	.18	288	.14	e.60	130	.21
29	.39	199	.21	.34	292	.25	e.45	151	.18
30	.36	211	.20	.15	223	.09	e3.0	98	.79
31	---	---	---	1.2	195	.34	---	---	---
TOTAL	23.98	---	11.51	44.77	---	12.59	71.90	---	10.25

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	e1.5	73	0.29	0.11	187	0.05	0.05	307	0.04
2	e1.1	96	.28	.08	250	.05	.15	279	.09
3	e.70	126	.24	.07	282	.06	.06	273	.05
4	e.45	140	.17	.06	293	.05	.04	276	.03
5	e.40	150	.16	.06	296	.05	.04	286	.03
6	e.35	156	.15	.05	301	.04	.04	286	.03
7	e.32	166	.14	.46	149	.17	.18	278	.11
8	e.29	173	.14	.06	221	.04	.05	227	.03
9	e.26	176	.12	.05	260	.03	.04	272	.03
10	e.23	186	.12	.05	281	.04	.04	290	.03
11	e.20	193	.10	.70	275	.14	.04	289	.03
12	e.18	201	.10	.21	140	.04	.04	288	.03
13	e.16	212	.09	.05	221	.03	.04	286	.03
14	e.14	234	.09	.04	256	.03	.03	287	.02
15	e.13	245	.09	.04	277	.03	.24	260	.10
16	e.12	255	.08	.04	283	.03	.05	167	.02
17	e.11	261	.08	1.8	159	.19	.04	259	.03
18	e.09	267	.06	.13	170	.06	.04	279	.03
19	e.08	266	.06	.09	209	.05	.04	274	.03
20	e.12	258	.08	.06	242	.04	.04	282	.03
21	e.09	272	.07	.05	261	.03	.04	278	.03
22	e.07	265	.05	.04	272	.03	2.1	173	.18
23	e5.0	184	2.48	.05	276	.03	.12	149	.04
24	e.25	143	.10	.40	152	.14	.05	236	.03
25	e.20	178	.10	.06	228	.04	.05	262	.03
26	e.15	196	.08	.14	229	.08	.05	267	.04
27	e.12	214	.07	.04	254	.03	.07	234	.05
28	e.10	269	.07	.04	271	.03	.06	268	.04
29	.46	247	.19	.07	261	.05	.06	264	.04
30	.09	188	.04	.06	280	.04	.05	261	.04
31	.96	114	.17	.14	282	.09	---	---	---
TOTAL	14.42	---	6.06	5.30	---	1.81	3.94	---	1.34
YEAR	331.03		151.65						

e Estimated

## CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	OCTOBER			NOVEMBER			DECEMBER		
				MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.00	0.00	0.00	5.8	160	0.72	1.8	200	0.83			
2	e.00	.00	.00	.84	50	.11	.39	350	.36			
3	e.05	310	.05	.11	88	.03	.34	410	.38			
4	.02	490	.03	.06	150	.03	.46	760	1.04			
5	.29	210	.10	.05	210	.03	.40	550	.59			
6	.02	270	.01	.04	260	.03	.28	490	.37			
7	.02	510	.02	.05	350	.05	.24	480	.31			
8	.01	580	.02	.36	410	.40	.21	480	.27			
9	.01	560	.01	3.1	110	.57	.18	500	.24			
10	.01	550	.01	.38	130	.13	.18	500	.24			
11	.00	.00	.00	.15	200	.08	.16	510	.22			
12	.00	.00	.00	.11	290	.08	.16	530	.23			
13	.00	.00	.00	.09	350	.09	.16	520	.23			
14	.00	.00	.00	.16	1800	.85	.16	520	.22			
15	.00	.00	.00	.24	3800	2.52	.14	540	.21			
16	.00	.00	.00	.17	2500	1.17	.13	560	.19			
17	.00	.00	.00	.18	2000	.93	.12	550	.18			
18	.00	.00	.00	.14	1500	.58	.11	540	.16			
19	.00	.00	.00	.13	1200	.43	.11	570	.17			
20	.00	.00	.00	.11	890	.27	.11	560	.17			
21	.00	.00	.00	.16	790	.35	.09	550	.14			
22	.00	.00	.00	2.3	460	2.89	.08	570	.13			
23	.00	.00	.00	.41	550	.59	.91	1200	2.83			
24	.00	.00	.00	.27	510	.37	.15	2700	1.09			
25	.48	70	.08	.21	530	.30	.96	2000	5.29			
26	.02	64	.00	.23	520	.33	.48	960	1.21			
27	1.4	32	.09	.35	580	.58	.26	670	.48			
28	.02	99	.01	.26	510	.35	.20	780	.43			
29	.02	250	.01	.23	510	.32	.56	670	1.45			
30	.02	330	.01	.72	510	.90	3.0	270	2.28			
31	.02	380	.02	---	---	---	.50	370	.49			
TOTAL	2.41	---	0.47	17.41	---	16.08	13.03	---	22.43			

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	JANUARY			FEBRUARY			MARCH		
				MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.28	410	0.31	0.72	420	0.81	2.2	210	1.22			
2	.27	450	.33	.70	420	.80	1.4	240	.91			
3	.33	460	.41	.80	390	.84	1.2	250	.81			
4	.62	380	.63	.80	370	.79	1.1	260	.75			
5	.63	380	.66	.80	1500	3.33	.99	270	.71			
6	.83	300	.69	.66	930	1.66	.90	270	.66			
7	2.0	230	1.02	.58	580	.91	.86	280	.65			
8	3.6	130	1.13	.60	530	.86	1.1	290	.84			
9	2.4	170	1.07	.57	500	.77	9.4	83	1.51			
10	1.3	230	.77	.57	480	.74	3.1	140	1.09			
11	.90	280	.67	.71	440	.83	1.8	210	1.00			
12	.64	320	.56	3.9	430	4.72	1.4	220	.83			
13	.74	400	.83	1.4	290	1.06	1.1	230	.70			
14	.50	360	.49	.95	330	.85	1.1	260	.78			
15	.42	420	.50	.77	350	.73	.98	240	.63			
16	.52	2100	3.06	.75	370	.75	.86	250	.57			
17	.39	1000	1.10	.78	440	1.01	.79	250	.53			
18	.42	2300	2.88	8.4	650	7.42	.81	310	.70			
19	.35	1700	1.63	2.2	250	1.46	4.8	150	1.61			
20	.37	2100	2.13	1.6	260	1.14	2.1	170	.91			
21	.30	990	.80	1.3	260	.94	1.6	1100	5.33			
22	.26	750	.52	1.1	270	.80	1.6	3800	16.8			
23	1.1	2600	11.0	.98	290	.76	1.4	1000	3.95			
24	8.0	410	9.28	7.2	180	2.84	1.5	560	2.30			
25	2.0	1300	6.87	3.9	160	1.60	1.3	420	1.49			
26	1.1	510	1.58	2.2	230	1.35	1.3	390	1.33			
27	.87	440	1.03	1.8	250	1.21	1.1	380	1.13			
28	.80	430	.93	1.6	260	1.08	.95	390	1.00			
29	.85	440	1.00	---	---	---	.87	400	.94			
30	.83	430	.97	---	---	---	.77	420	.87			
31	.80	430	.93	---	---	---	.73	430	.84			
TOTAL	34.42	---	55.78	48.34	---	42.06	51.11	---	53.39			

e Estimated

CHARLES RIVER BASIN

01104415 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 2, NEAR LEXINGTON, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	1.1	490	1.81	0.32	390	0.34	2.4	230	0.75
2	1.6	330	1.43	1.9	220	.94	.33	400	.35
3	.83	360	.81	1.0	280	.68	.91	270	.56
4	.72	380	.73	.94	240	.60	.17	410	.18
5	.66	390	.69	2.5	180	1.00	.14	470	.18
6	.59	400	.63	5.3	110	1.33	.12	500	.16
7	.52	410	.58	2.8	180	1.29	1.4	350	.56
8	.66	420	.77	1.6	230	1.01	.94	210	.51
9	.88	340	.85	1.3	250	.87	.29	290	.22
10	.95	310	.78	7.8	98	1.70	.19	390	.20
11	.51	380	.52	5.3	140	1.59	.15	430	.17
12	.45	410	.49	2.7	190	1.34	.16	440	.19
13	.42	420	.47	1.8	240	1.16	27	100	1.58
14	.38	430	.45	1.4	260	.93	12	63	1.60
15	.35	440	.42	1.0	270	.75	5.3	100	1.13
16	.33	450	.39	.84	280	.64	e4.0	110	1.18
17	.98	380	.87	.76	300	.60	e2.5	150	1.00
18	.45	360	.44	.64	330	.57	e2.0	180	.94
19	.34	400	.37	.53	380	.55	e1.5	190	.78
20	2.4	210	1.15	.45	400	.49	e1.1	210	.61
21	.55	320	.47	.41	410	.46	e.90	210	.52
22	.44	350	.41	.34	430	.40	e.80	220	.47
23	2.4	300	1.04	.31	440	.37	e.70	230	.43
24	2.1	180	.92	.28	450	.34	e.60	240	.40
25	.85	260	.60	.26	460	.32	e.55	260	.39
26	.70	290	.55	.23	480	.30	e.75	220	.45
27	.61	310	.51	.19	490	.26	e.95	200	.52
28	.46	330	.41	.18	510	.24	e.60	230	.37
29	.39	350	.37	.34	510	.44	e.45	270	.32
30	.36	370	.36	.15	390	.16	e3.0	170	1.40
31	---	---	---	1.2	340	.59	---	---	---
TOTAL	23.98	---	20.29	44.77	---	22.26	71.90	---	18.12

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	e1.5	130	0.52	0.11	330	0.10	0.05	540	0.07
2	e1.1	170	.50	.08	440	.10	.15	490	.16
3	e.70	220	.42	.07	500	.10	.06	480	.08
4	e.45	250	.30	.06	520	.09	.04	490	.05
5	e.40	260	.29	.06	520	.08	.04	500	.05
6	e.35	270	.26	.05	530	.08	.04	500	.05
7	e.32	290	.25	.46	260	.29	.18	490	.19
8	e.29	300	.24	.06	390	.06	.05	400	.05
9	e.26	310	.22	.05	460	.06	.04	480	.05
10	e.23	330	.20	.05	490	.06	.04	510	.06
11	e.20	340	.18	.70	480	.25	.04	510	.05
12	e.18	350	.17	.21	250	.07	.04	510	.05
13	e.16	370	.16	.05	390	.05	.04	500	.05
14	e.14	410	.16	.04	450	.05	.03	510	.04
15	e.13	430	.15	.04	490	.05	.24	460	.18
16	e.12	450	.14	.04	500	.05	.05	290	.04
17	e.11	460	.14	1.8	280	.33	.04	460	.05
18	e.09	470	.11	.13	300	.10	.04	490	.05
19	e.08	470	.10	.09	370	.09	.04	480	.05
20	e.12	450	.15	.06	430	.07	.04	500	.05
21	e.09	480	.12	.05	460	.06	.04	490	.05
22	e.07	470	.09	.04	480	.06	2.1	310	.32
23	e5.0	320	4.36	.05	490	.06	.12	260	.07
24	e.25	250	.17	.40	270	.25	.05	420	.05
25	e.20	310	.17	.06	400	.06	.05	460	.06
26	e.15	340	.14	.14	400	.14	.05	470	.07
27	e.12	380	.12	.04	450	.05	.07	410	.08
28	e.10	470	.13	.04	480	.05	.06	470	.08
29	.46	430	.34	.07	460	.09	.06	460	.07
30	.09	330	.08	.06	490	.07	.05	460	.07
31	.96	200	.30	.14	500	.16	---	---	---
TOTAL	14.42	---	10.68	5.30	---	3.18	3.94	---	2.34
YEAR	331.03		267.08						

e Estimated





01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

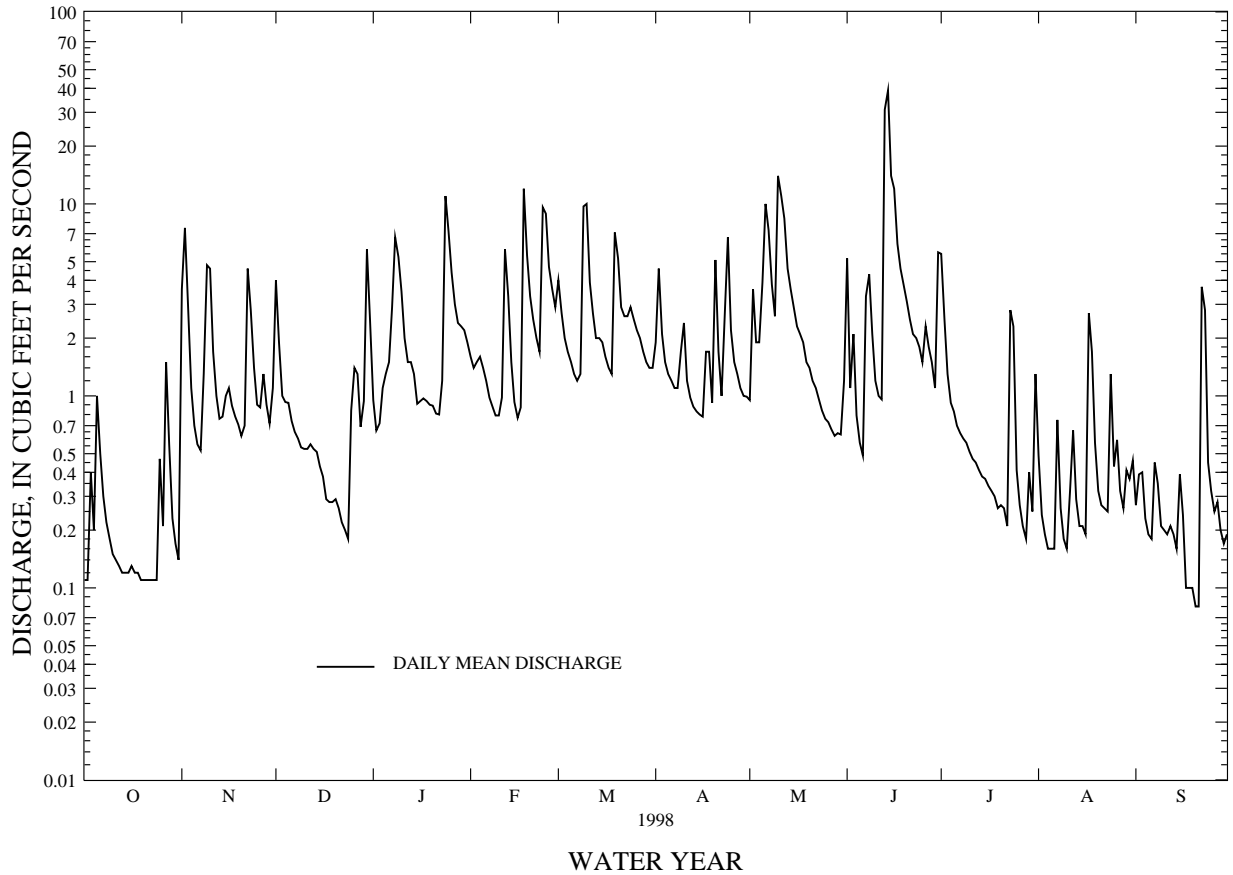
SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	701.55	
ANNUAL MEAN	1.92	
HIGHEST DAILY MEAN	39	Jun 14
LOWEST DAILY MEAN	.08	Sep 20
ANNUAL SEVEN-DAY MINIMUM	.11	Oct 18
INSTANTANEOUS PEAK FLOW	73	Jun 13
INSTANTANEOUS PEAK STAGE	3.42	Jun 13
INSTANTANEOUS LOW FLOW	.07	Sep 21
ANNUAL RUNOFF (CFSM)	2.63	
ANNUAL RUNOFF (INCHES)	35.75	
10 PERCENT EXCEEDS	4.6	
50 PERCENT EXCEEDS	.97	
90 PERCENT EXCEEDS	.19	

e Estimated

CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3,  
NEAR LEXINGTON, MA 01104420



## CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to September 1998.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1997 to September 1998.

WATER TEMPERATURE: October 1997 to September 1998.

CALCIUM CONCENTRATION: October 1997 to September 1998.

CALCIUM LOAD: October 1997 to September 1998.

SODIUM CONCENTRATION: October 1997 to September 1998.

SODIUM LOAD: October 1997 to September 1998.

CHLORIDE CONCENTRATION: October 1997 to September 1998.

CHLORIDE LOAD: October 1997 to September 1998.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

REMARKS.--Records good, except those for estimated daily specific conductances, which are poor. Calcium, sodium, and chloride concentrations and loads records are good, except those for which have estimated daily discharge and/or specific conductance.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 7,500  $\mu$ S/cm, Jan. 23 and Feb. 18; minimum, 18  $\mu$ S/cm, Sept. 22.

WATER TEMPERATURE: Maximum recorded, 26.3°C, Aug. 3; minimum, -0.3°C, Jan. 23.

CALCIUM CONCENTRATION: Maximum daily mean, 77 mg/L, Dec. 24; minimum daily mean, 9.6 mg/L, Nov. 9.

CALCIUM LOAD: Maximum daily, 1.06 tons, June 14; minimum daily, 0.00 tons, several days.

SODIUM CONCENTRATION: Maximum daily mean, 705 mg/L, Dec. 24; minimum daily mean, 19 mg/L, Nov. 9.

SODIUM LOAD: Maximum daily, 4.85 tons, Jan. 24; minimum daily, 0.01 tons, several days.

CHLORIDE CONCENTRATION: Maximum daily mean, 1,300 mg/L, Dec. 23, 24; minimum daily mean, 33 mg/L, Nov. 9.

CHLORIDE LOAD: Maximum daily, 8.62 tons, Jan. 24; minimum daily, 0.02 tons, several days.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (PER- CENT SATUR- ATION) (00301)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
22...	1000	0.13	360	6.5	--	6.6	752	8.1	67	15
23...	1245	.11	369	6.8	9.3	5.5	772	--	--	15
27...	1315	1.2	269	6.3	--	6.9	744	7.8	66	--
NOV										
18...	1315	.90	796	6.6	--	4.6	764	9.9	77	--
20...	1205	.60	784	6.9	--	3.8	774	--	--	28
22...	1115	5.7	405	6.2	--	2.6	765	11.1	81	13
DEC										
13...	1145	.49	689	8.7	--	.6	758	13.3	93	--
15...	1330	.49	680	6.5	5.0	1.5	755	--	--	28
24...	1300	.22	4170	6.6	--	2.1	772	--	--	71
JAN										
13...	1300	1.3	960	6.6	--	3.4	755	10.2	77	33
16...	1030	1.0	3310	6.6	--	.5	756	10.7	76	73
16...	1215	1.1	4300	6.7	--	.3	756	11.0	78	88
16...	1400	1.1	2440	6.8	--	.3	756	11.3	79	63
23...	1420	.79	1580	6.9	-.2	1.0	764	--	--	47
FEB										
12...	1045	6.4	580	6.9	11.9	3.4	740	--	--	18
MAR										
17...	1245	1.4	789	4.1	8.6	4.9	772	12.4	96	30
22...	0920	2.6	5220	6.1	-1.9	.1	741	--	--	52
22...	1415	2.8	4600	6.6	.5	1.3	741	--	--	69
23...	0920	2.3	1580	6.7	3.6	1.6	752	--	--	35
23...	1400	2.8	1770	6.7	5.6	5.2	751	--	--	35
APR										
14...	0930	.85	927	6.9	13.6	7.5	756	--	--	35
MAY										
12...	1230	7.3	424	6.6	10.9	13.3	761	8.8	84	--
19...	0800	1.5	700	6.7	17.8	13.7	751	--	--	27
JUN										
02...	1500	.83	657	6.8	24.5	16.5	746	--	--	27
JUL										
07...	1330	.65	786	6.8	28.1	19.0	759	6.7	73	31
29...	0745	.19	845	6.9	26.3	20.3	750	--	--	34
AUG										
11...	1140	.18	731	6.9	26.9	21.1	750	5.8	66	--
SEP										
16...	1500	.14	630	6.7	26.6	20.2	756	5.5	61	27

CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
22...	3.1	51	2.1	30	7.4	81	0.31	5.8	200	<.010
23...	--	50	--	--	--	81	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	<.010
NOV										
18...	--	--	--	32	20	--	--	--	--	.017
20...	--	103	--	--	--	190	--	--	--	--
22...	2.4	63	2.0	--	12	110	<.10	4.3	246	.014
DEC										
13...	--	--	--	--	18	--	--	--	--	.025
15...	--	89	--	--	--	170	--	--	--	--
24...	8.4	696	4.2	--	29	1200	.21	10	2170	--
JAN										
13...	6.1	111	3.0	25	21	210	.13	11	437	<.010
16...	8.3	552	.92	--	23	980	.13	11	1740	.013
16...	8.7	706	4.5	--	24	1200	.14	10	2170	.015
16...	7.8	411	3.7	--	21	740	.14	11	1330	<.010
23...	6.6	247	.71	--	21	460	.14	11	874	.015
FEB										
12...	--	88	--	--	--	150	--	--	--	--
MAR										
17...	5.6	105	2.9	--	18	190	.14	9.2	413	<.010
22...	10	936	5.3	--	38	1600	<.10	7.6	2730	<.010
22...	10	807	5.3	--	38	1500	.12	7.6	2570	<.010
23...	6.3	244	3.4	--	21	460	<.10	8.3	852	--
23...	6.1	288	3.3	--	22	510	.13	7.7	946	--
APR										
14...	--	130	--	--	--	240	--	--	--	.017
MAY										
12...	--	--	--	--	12	--	--	--	--	.012
19...	--	96	--	--	--	170	--	--	--	--
JUN										
02...	--	90	--	--	--	160	--	--	--	--
JUL										
07...	5.6	104	3.0	--	12	180	.17	13	434	.017
29...	--	117	--	--	--	220	--	--	--	--
AUG										
11...	--	--	--	--	5.2	--	--	--	--	.021
SEP										
16...	5.2	82	3.7	--	17	140	.33	9.9	341	.028

## CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
22...	0.134	<0.015	0.24	<0.20	0.014	<0.010	<0.010	300	55	4.4
23...	--	--	--	--	--	--	--	--	--	--
27...	<.050	<.015	.51	.33	.032	.016	.010	--	--	9.0
NOV										
18...	.404	.063	.33	.27	<.010	<.010	.020	380	149	4.7
20...	--	--	--	--	--	--	--	--	--	--
22...	.276	<.020	.34	.27	.015	<.010	.018	220	91	--
DEC										
13...	.592	.133	.32	.35	<.010	<.010	<.010	290	164	--
15...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	800	488	--
JAN										
13...	.952	<.020	.27	.24	<.010	<.010	.012	210	113	--
16...	.899	.153	.39	.31	<.010	<.010	.011	250	167	--
16...	.919	.155	.42	.37	.010	<.010	.012	250	181	--
16...	.964	.105	.31	.29	<.010	.011	.013	220	160	--
23...	.745	.121	.32	.37	<.010	<.010	.017	260	163	--
FEB										
12...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	.358	.050	.25	.10	<.010	<.010	.001	220	117	6.3
22...	.740	.113	.35	.33	<.010	<.010	<.010	190	124	--
22...	.709	.144	.34	.36	<.010	<.010	<.010	200	145	--
23...	--	--	--	--	--	--	--	210	118	--
23...	--	--	--	--	--	--	--	340	134	--
APR										
14...	.450	.082	.34	.34	.015	<.010	.003	--	--	--
MAY										
12...	.532	.030	.41	.38	<.010	<.010	<.001	200	42	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
02...	--	--	--	--	--	--	--	--	--	--
JUL										
07...	.442	.128	.60	.36	.061	.021	.009	700	335	--
29...	--	--	--	--	--	--	--	--	--	--
AUG										
11...	.521	.274	.36	.47	<.010	<.010	.003	340	270	--
SEP										
16...	.644	.147	.63	<.10	.067	<.010	.005	240	179	--

CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	e350	e350	e350	e570	e57	e258	589	390	453	934	780	880
2	e350	e350	e350	253	79	200	646	505	584	941	888	919
3	e335	e150	e300	371	253	325	699	640	671	958	855	911
4	e335	e335	e335	415	369	392	e1500	e695	e942	855	724	786
5	e335	e150	e300	463	400	421	868	707	747	762	701	724
6	e335	e335	e335	434	426	431	731	703	714	793	619	677
7	e375	e335	e370	434	425	429	745	691	716	684	375	553
8	e385	e375	e380	429	257	362	720	684	700	428	291	363
9	e398	e385	e390	e293	e116	e160	714	692	701	590	409	471
10	e412	e398	e405	270	148	214	717	684	701	718	524	628
11	e412	e378	e390	353	270	313	849	680	709	772	702	741
12	e378	e368	e375	403	353	381	766	628	647	816	714	772
13	e368	e354	e360	427	402	417	671	647	658	e1400	e796	e887
14	e354	e348	e347	e3000	e413	e1350	697	664	673	848	721	787
15	e350	e348	e349	e4000	e2030	e2820	726	682	702	e3000	e766	e946
16	e352	e350	e351	e2020	e1440	e1760	845	681	715	e4500	e883	e1920
17	e354	e352	e353	1440	1180	1280	943	845	912	e1260	e932	e1040
18	e356	e354	e355	1180	880	1010	955	892	917	e5000	e864	e2170
19	e357	e356	e357	942	895	917	949	872	904	e2000	e1000	e1290
20	e358	e357	e358	904	766	826	928	860	884	e3000	e1160	e1720
21	e360	e358	e359	838	668	764	958	856	930	1340	989	1140
22	e363	e360	e360	e2500	e424	e648	1060	953	1030	1000	879	936
23	e474	e363	e419	703	510	623	e6000	e1040	e4010	e7500	e907	e2300
24	668	352	506	706	657	682	e4750	e3370	e4180	2800	741	1150
25	634	125	377	742	699	720	e7000	e1470	e2740	e2000	e834	e1200
26	422	317	367	e1500	e689	e752	1470	956	1180	1110	953	1020
27	477	96	258	e1210	e702	e761	1490	862	969	1000	949	975
28	433	367	412	725	700	711	e2500	e1050	e1430	987	942	965
29	515	432	483	718	688	705	e3620	e586	e1140	945	863	917
30	480	431	459	1090	527	699	646	487	540	950	889	912
31	462	414	441	---	---	---	839	622	736	960	927	943
MONTH	668	96	373	4000	57	711	7000	390	1080	7500	291	1020
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	985	883	945	716	617	658	6100	666	1000	823	793	807
2	1010	911	963	776	688	744	722	573	641	836	356	483
3	991	901	954	806	768	786	765	685	729	667	505	572
4	918	887	904	841	789	811	777	743	760	655	468	550
5	e4000	e902	e1630	825	779	804	789	766	776	569	277	445
6	1820	1050	1270	849	782	815	799	766	787	377	242	302
7	1140	1020	1090	851	799	822	851	773	809	450	288	363
8	1070	969	1030	850	533	787	861	666	808	579	448	523
9	1050	963	1020	597	166	361	748	581	673	609	493	593
10	1020	943	982	486	236	346	656	499	581	493	202	267
11	1000	841	924	583	458	525	774	656	726	383	245	308
12	e5400	e587	e817	638	556	596	819	724	776	462	309	379
13	821	660	745	675	564	638	865	755	809	532	461	503
14	930	777	861	744	615	645	877	776	822	567	528	547
15	1050	899	986	638	602	617	894	795	845	601	557	578
16	1090	999	1030	629	590	608	885	791	827	616	586	601
17	e2750	e981	e1080	633	590	606	955	460	779	624	606	615
18	e7500	e420	e1080	728	590	630	714	545	633	650	611	630
19	719	446	610	1050	236	357	783	714	759	744	645	699
20	787	712	757	453	276	366	791	222	391	747	720	732
21	807	776	789	2960	449	1090	634	466	568	753	734	743
22	833	790	810	4160	2060	3010	733	632	691	763	747	756
23	850	825	836	2330	933	1250	854	236	626	771	758	765
24	851	339	500	933	713	793	512	242	369	785	766	778
25	610	368	471	757	674	719	662	511	606	795	774	788
26	769	610	697	715	660	694	749	651	706	804	776	791
27	800	749	772	968	645	816	764	692	727	829	785	807
28	820	716	784	977	894	930	814	728	772	844	792	823
29	---	---	---	980	911	950	808	743	777	895	496	826
30	---	---	---	947	880	913	816	776	795	827	722	777
31	---	---	---	930	902	918	---	---	---	873	96	688
MONTH	7500	339	905	4160	166	794	6100	222	719	895	96	614

e Estimated

## CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

SPECIFIC CONDUCTANCE ( $\mu\text{S}/\text{CM}$  AT  $25^\circ\text{C}$ ), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	440	149	355	329	228	269	417	291	362	718	596	631
2	714	440	575	419	286	358	491	404	446	751	156	655
3	825	159	462	487	419	460	564	479	505	755	508	565
4	696	549	634	537	487	521	678	491	538	713	636	674
5	776	676	729	560	535	552	613	491	551	767	673	727
6	832	717	792	586	558	575	569	216	498	794	674	730
7	829	50	555	614	575	596	535	104	374	766	217	618
8	422	287	335	622	585	610	675	524	613	730	495	574
9	540	360	461	624	603	616	759	634	699	713	621	671
10	653	531	606	658	609	641	799	525	737	732	690	709
11	716	649	693	682	636	661	914	127	687	742	653	707
12	750	628	723	684	649	671	494	209	408	723	652	689
13	723	71	219	703	641	679	654	490	576	737	677	706
14	243	121	176	710	648	683	720	593	646	803	650	676
15	514	174	302	731	641	697	741	679	703	710	44	588
16	418	249	319	746	675	706	772	664	729	594	363	500
17	484	396	443	763	683	722	796	50	436	661	547	587
18	500	450	484	747	679	718	732	292	415	653	587	624
19	601	464	501	758	723	743	564	463	512	658	566	618
20	546	519	537	802	693	758	697	564	630	681	577	638
21	564	539	550	796	734	762	737	660	696	696	581	623
22	587	555	570	778	715	749	783	701	735	e657	e18	e410
23	584	496	542	781	28	522	785	704	746	392	217	326
24	530	505	516	404	269	336	783	202	418	523	392	459
25	550	529	542	527	401	468	667	438	540	682	512	549
26	549	248	445	670	508	570	672	302	548	615	524	577
27	509	410	464	693	558	620	692	514	601	673	541	601
28	509	431	478	843	617	691	772	689	728	652	600	618
29	527	503	517	860	204	572	776	573	679	675	631	652
30	522	170	354	592	392	477	736	639	687	670	618	648
31	---	---	---	648	100	301	803	405	651	---	---	---
MONTH	832	50	496	860	28	590	914	50	584	803	18	612
YEAR	7500	18	707									

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	13.3	9.1	10.9	4.1	1.3	3.1	0.7	0.2	0.5
2	---	---	---	14.6	11.8	12.8	2.9	.7	1.8	1.0	.6	.7
3	---	---	---	13.1	10.3	11.6	4.0	1.4	2.7	2.8	1.0	2.0
4	---	---	---	11.8	9.0	10.4	9.1	3.0	4.6	3.1	2.0	2.4
5	---	---	---	10.3	7.9	9.2	5.5	4.1	4.8	3.5	1.8	2.5
6	---	---	---	8.8	6.1	7.6	4.1	2.3	3.2	5.2	2.8	3.8
7	---	---	---	9.3	7.2	8.3	4.1	1.9	3.0	3.7	1.8	3.0
8	---	---	---	9.6	8.6	8.8	4.0	2.2	3.0	2.4	1.6	2.0
9	---	---	---	9.8	8.3	8.6	3.4	1.3	2.3	2.9	1.9	2.4
10	---	---	---	9.5	8.1	8.8	3.6	2.0	2.8	3.5	1.1	2.2
11	---	---	---	9.1	6.1	8.1	3.1	1.1	2.2	3.4	1.1	2.1
12	---	---	---	6.3	4.3	5.3	3.7	.9	2.5	1.6	.3	1.0
13	---	---	---	5.3	3.5	4.4	3.5	1.4	2.5	3.8	.9	2.2
14	---	---	---	10.8	.9	4.6	2.9	.9	1.9	1.3	.2	.6
15	---	---	---	10.3	3.2	6.8	1.6	.9	1.2	4.8	.2	.7
16	---	---	---	4.2	2.7	3.3	2.4	1.0	1.5	6.7	.4	2.1
17	---	---	---	4.4	1.6	3.0	3.2	1.4	2.3	1.1	.3	.7
18	---	---	---	5.2	2.2	3.6	3.2	1.6	2.0	8.6	.7	3.7
19	---	---	---	4.2	1.4	3.0	3.3	1.5	2.4	5.7	1.0	1.9
20	---	---	---	5.1	1.9	3.2	3.5	1.7	2.5	6.5	1.4	2.5
21	---	---	---	5.3	2.0	3.6	3.3	1.4	2.0	2.1	.6	1.3
22	---	---	---	8.9	1.4	2.9	2.6	2.1	2.4	1.3	.5	.8
23	---	---	---	2.7	1.4	2.1	9.1	2.2	4.7	7.8	-.3	2.1
24	7.9	5.6	6.7	4.6	2.6	3.4	6.3	5.5	6.0	.9	.2	.4
25	9.7	7.5	8.2	3.3	1.1	2.3	7.9	.2	2.6	.8	.2	.5
26	7.8	5.4	6.8	8.5	2.7	4.3	.7	.2	.4	1.4	.3	.7
27	9.9	7.6	8.4	5.6	1.8	4.2	1.8	.1	.7	1.3	.3	.8
28	8.6	6.6	7.7	3.7	1.6	2.8	8.7	.4	3.2	2.1	1.2	1.7
29	7.9	5.6	6.8	4.5	2.5	3.5	8.3	.3	.9	3.0	1.5	2.2
30	9.2	6.0	7.5	6.8	1.7	3.2	1.5	.1	.4	2.9	1.8	2.3
31	9.2	5.4	7.5	---	---	---	1.0	.1	.4	3.0	1.4	2.3
MONTH	---	---	---	14.6	.9	5.8	9.1	.1	2.5	8.6	-.3	1.7

CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.0	0.4	1.6	6.0	5.2	5.5	15.2	7.8	10.8	17.1	11.9	14.7
2	3.3	.4	1.8	8.7	4.8	6.5	8.8	7.4	8.1	16.5	12.9	14.5
3	4.4	1.8	3.0	6.4	5.1	5.7	11.2	7.2	9.0	16.3	13.1	14.3
4	3.5	1.8	2.6	7.6	3.6	5.7	8.5	6.4	7.4	17.0	12.2	14.2
5	7.3	.9	2.3	6.0	4.3	5.3	7.3	5.1	6.2	18.5	12.8	15.5
6	2.5	.3	1.2	6.9	2.9	4.8	9.8	5.2	7.3	15.8	13.6	14.6
7	2.1	.4	1.2	6.2	4.4	5.3	13.5	5.1	9.0	15.3	13.8	14.5
8	2.8	.7	1.5	6.8	3.3	5.1	12.9	5.9	9.3	16.2	13.3	14.5
9	2.6	.5	1.4	10.8	4.3	6.5	11.8	8.1	9.6	14.0	12.4	13.0
10	3.6	.5	1.8	10.2	4.7	8.5	12.9	6.2	9.2	12.6	10.8	11.5
11	5.4	1.7	3.3	5.6	1.3	3.3	13.3	5.2	9.0	11.1	10.0	10.5
12	6.7	2.2	3.6	2.8	.2	1.2	13.8	5.3	9.4	15.7	9.6	12.1
13	4.9	1.5	2.8	2.8	.2	1.4	14.5	5.5	9.9	15.4	9.6	11.9
14	1.9	.3	.9	2.9	1.1	2.0	14.9	6.5	10.6	16.5	9.3	12.5
15	1.0	.3	.6	4.6	1.2	2.7	13.8	7.6	10.4	18.7	9.7	14.1
16	1.1	.5	.8	5.6	1.1	3.1	14.8	9.3	11.8	19.0	13.0	15.8
17	3.8	.9	1.8	6.7	.8	3.4	15.1	12.0	13.1	16.3	12.5	14.3
18	3.9	.5	1.0	5.2	1.9	3.6	15.6	9.8	12.7	19.4	12.8	15.9
19	2.3	.8	1.6	4.8	2.9	3.6	13.1	10.2	11.6	18.8	13.8	16.2
20	5.2	1.2	3.2	4.0	2.8	3.3	11.3	9.3	10.3	18.9	13.0	15.9
21	5.4	2.9	3.9	3.3	1.2	2.3	16.1	6.9	11.2	19.0	14.6	16.6
22	6.2	1.7	3.8	1.6	.2	1.0	17.1	8.1	12.4	17.4	12.8	15.1
23	3.8	1.4	2.7	5.5	1.0	2.8	12.7	8.7	10.5	17.6	12.3	15.0
24	3.4	1.9	2.8	8.0	.9	4.1	11.9	8.0	9.5	18.4	12.9	15.7
25	4.9	2.7	3.5	8.7	1.4	4.8	12.6	8.6	10.3	16.6	13.0	15.0
26	6.9	2.4	4.3	9.9	3.0	6.4	11.0	6.7	9.1	18.1	13.4	15.9
27	7.7	2.8	5.0	14.2	6.8	10.4	14.4	7.5	10.6	18.7	13.4	16.0
28	8.1	3.2	5.6	15.7	9.6	12.4	13.3	7.1	10.1	19.6	14.2	17.0
29	---	---	---	15.6	10.6	12.8	16.9	7.0	11.8	21.5	16.3	18.7
30	---	---	---	16.6	8.8	12.7	18.9	11.3	14.7	21.0	17.2	18.9
31	---	---	---	19.3	12.2	15.5	---	---	---	19.2	15.4	17.2
MONTH	8.1	.3	2.5	19.3	.2	5.5	18.9	5.1	10.2	21.5	9.3	14.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.8	16.6	18.4	20.2	18.0	18.7	19.8	16.9	18.5	19.3	16.8	18.1
2	17.7	13.8	15.8	19.7	16.6	18.2	22.3	16.6	18.7	21.9	17.0	18.2
3	17.5	14.1	15.9	20.1	16.6	18.4	26.3	17.3	19.9	19.6	17.2	18.5
4	14.8	12.1	13.5	20.1	17.7	19.0	24.9	17.8	19.6	19.7	17.5	18.6
5	16.0	12.0	14.0	20.0	18.3	19.2	25.6	17.4	20.1	18.8	16.4	17.5
6	15.5	12.8	14.3	19.3	17.0	18.2	24.7	18.9	20.7	20.0	16.2	18.0
7	18.4	13.4	14.5	19.4	17.3	18.4	22.3	19.6	20.9	21.7	18.8	19.5
8	14.6	13.2	13.9	19.0	17.5	18.2	22.3	19.3	20.6	19.4	17.2	18.6
9	16.9	12.7	14.6	19.2	16.8	18.0	22.7	18.9	20.5	17.2	15.4	16.1
10	18.3	13.9	16.0	20.0	17.7	18.7	23.7	19.7	21.3	16.5	14.7	15.6
11	17.4	14.4	15.9	18.4	16.3	17.5	23.5	19.5	21.4	17.0	14.7	15.8
12	16.0	14.1	15.1	18.8	15.8	17.4	21.6	18.4	19.8	18.4	14.8	16.7
13	17.6	15.2	16.6	20.3	16.4	18.4	19.7	17.3	18.4	18.2	16.7	17.6
14	16.5	15.9	16.2	21.8	18.2	20.0	20.2	17.5	18.8	17.4	15.9	16.7
15	20.2	15.7	17.0	22.5	18.9	20.8	21.1	18.4	19.6	23.2	17.2	18.9
16	17.5	16.2	16.6	23.3	20.2	21.7	22.2	19.4	20.7	21.1	18.1	20.0
17	17.0	15.6	16.3	23.0	20.2	21.8	24.0	19.5	21.0	18.1	15.2	16.6
18	18.4	15.8	17.0	24.5	19.9	21.5	22.5	20.4	21.2	16.7	15.2	16.0
19	19.1	16.0	17.3	23.5	17.6	19.9	20.4	17.5	18.5	18.0	14.8	16.3
20	18.8	16.6	17.5	22.8	19.5	20.7	18.6	15.6	17.3	19.5	16.5	17.8
21	18.9	16.8	17.6	24.4	19.3	21.2	19.5	17.3	18.3	19.9	17.6	18.7
22	18.5	16.2	17.2	25.0	20.3	22.1	20.2	17.2	18.7	21.6	18.3	19.5
23	17.9	16.5	17.3	25.0	20.7	22.1	19.9	17.8	19.0	18.3	13.5	15.9
24	20.3	17.2	18.7	22.4	20.0	21.5	22.6	19.7	21.4	14.3	11.3	13.0
25	20.7	18.3	19.5	20.4	17.8	19.2	22.5	21.0	21.7	15.9	12.3	14.1
26	21.7	19.4	20.5	21.0	17.6	18.9	22.0	20.3	21.4	17.7	15.6	16.6
27	21.6	18.0	19.5	23.9	16.9	19.2	22.3	20.4	21.2	19.8	17.1	18.4
28	18.3	16.0	17.3	25.2	18.3	20.8	21.8	19.1	20.3	19.3	16.6	18.3
29	18.0	16.4	17.3	25.5	20.0	21.8	20.1	19.3	19.8	16.6	13.8	15.1
30	20.1	17.7	18.5	21.9	18.8	20.1	21.1	19.0	19.9	17.2	14.1	15.2
31	---	---	---	20.5	18.8	19.5	19.9	18.5	19.1	---	---	---
MONTH	21.7	12.0	16.7	25.5	15.8	19.7	26.3	15.6	19.9	23.2	11.3	17.2



## CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.11	16	0.00	3.6	12	0.04	4.0	19	0.20
2	e.11	16	.00	7.5	11	.23	1.9	22	.11
3	e.40	15	.02	3.0	16	.12	1.0	24	.07
4	e.20	16	.01	1.1	17	.05	.93	30	.08
5	e1.0	15	.04	.70	18	.03	.92	26	.06
6	e.50	16	.02	.56	19	.03	.74	25	.05
7	e.30	17	.01	.52	18	.03	.65	26	.05
8	e.22	17	.01	1.3	17	.06	.60	25	.04
9	e.18	17	.01	4.8	9.6	.10	.54	25	.04
10	e.15	18	.01	4.6	12	.14	.53	25	.04
11	e.14	17	.01	1.7	15	.07	.53	25	.04
12	e.13	17	.01	1.0	17	.05	.56	24	.04
13	e.12	17	.00	.76	18	.04	.53	24	.03
14	e.12	16	.00	.78	36	.08	.51	25	.03
15	e.12	16	.00	1.0	60	.17	.43	25	.03
16	e.13	16	.01	1.1	45	.13	.38	26	.03
17	e.12	16	.00	.89	37	.09	.29	30	.02
18	e.12	16	.00	.78	32	.07	.28	30	.02
19	e.11	16	.00	.71	30	.06	.28	30	.02
20	e.11	17	.00	.62	28	.05	.29	29	.02
21	e.11	17	.00	.70	27	.05	.26	30	.02
22	e.11	17	.00	4.6	23	.27	.22	32	.02
23	e.11	18	.00	2.8	23	.17	.20	73	.04
24	.11	20	.01	1.4	25	.09	.18	77	.04
25	.47	17	.02	.90	26	.06	.84	58	.12
26	.21	17	.01	.87	26	.06	1.4	35	.13
27	1.5	13	.05	1.3	26	.09	1.3	31	.10
28	.56	18	.03	.90	25	.06	.69	39	.07
29	.23	20	.01	.72	25	.05	.94	34	.09
30	.17	19	.01	1.1	25	.07	5.8	21	.33
31	.14	19	.01	---	---	---	2.5	26	.17
TOTAL	8.11	---	0.31	52.31	---	2.61	30.22	---	2.15

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.95	29	0.07	1.6	30	0.13	4.0	24	0.26
2	.66	30	.05	1.4	31	.12	2.7	26	.19
3	.72	30	.06	1.5	31	.12	2.0	27	.14
4	1.1	27	.08	1.6	30	.13	1.7	28	.13
5	1.3	26	.09	1.4	42	.16	1.5	27	.11
6	1.5	25	.10	1.2	36	.12	1.3	28	.10
7	2.9	22	.16	.98	33	.09	1.2	28	.09
8	6.7	17	.30	.88	32	.08	1.3	27	.09
9	5.3	20	.28	.79	32	.07	9.7	16	.40
10	3.5	23	.22	.79	31	.07	10	16	.41
11	2.0	26	.14	.98	30	.08	3.9	21	.22
12	1.5	27	.10	5.8	27	.41	2.7	23	.16
13	1.5	29	.12	3.3	26	.23	2.0	24	.13
14	1.3	27	.09	1.5	29	.12	2.0	24	.13
15	.91	30	.07	.93	31	.08	1.9	23	.12
16	.94	46	.12	.77	32	.07	1.6	23	.10
17	.97	32	.08	.87	33	.08	1.4	23	.09
18	.94	49	.13	12	30	.74	1.3	24	.09
19	.90	37	.09	5.4	23	.33	7.1	16	.29
20	.89	44	.10	3.3	26	.24	5.2	17	.23
21	.81	34	.07	2.5	27	.19	2.9	31	.24
22	.80	30	.06	2.0	28	.15	2.6	63	.44
23	1.2	50	.20	1.7	28	.13	2.6	36	.25
24	11	34	1.00	9.6	20	.48	2.9	27	.21
25	7.2	35	.67	8.9	20	.45	2.5	26	.17
26	4.4	32	.38	4.7	25	.32	2.2	25	.15
27	3.0	31	.25	3.6	27	.26	2.0	28	.15
28	2.4	31	.20	2.9	27	.21	1.7	30	.14
29	2.3	30	.19	---	---	---	1.5	30	.13
30	2.2	30	.17	---	---	---	1.4	30	.11
31	1.9	30	.16	---	---	---	1.4	30	.11
TOTAL	73.69	---	5.80	82.89	---	5.66	88.2	---	5.58

e Estimated

CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	1.9	31	.17	0.95	28	0.07	5.2	16	0.22
2	4.6	24	.29	3.6	20	.19	1.1	22	.06
3	2.1	26	.14	1.9	22	.11	2.1	19	.10
4	1.5	26	.10	1.9	22	.11	.79	24	.05
5	1.3	27	.09	3.9	19	.19	.57	26	.04
6	1.2	27	.09	10	15	.41	.49	27	.04
7	1.1	28	.08	7.3	17	.32	3.3	21	.11
8	1.1	28	.08	3.8	21	.21	4.3	16	.18
9	1.7	25	.11	2.6	23	.16	2.1	19	.11
10	2.4	22	.14	14	14	.50	1.2	23	.07
11	1.2	26	.09	11	15	.44	1.0	25	.07
12	.98	27	.07	8.4	17	.37	.96	26	.07
13	.88	28	.06	4.6	20	.25	31	11	.76
14	.83	28	.06	3.6	22	.21	39	10	1.06
15	.80	28	.06	2.9	22	.17	14	15	.54
16	.78	28	.06	2.3	23	.14	12	15	.50
17	1.7	27	.11	2.1	23	.13	6.2	19	.31
18	1.7	24	.11	1.9	24	.12	4.6	20	.25
19	.92	26	.07	1.5	25	.10	3.8	20	.21
20	5.1	17	.22	1.4	26	.09	3.1	21	.18
21	1.7	22	.10	1.2	26	.09	2.5	22	.15
22	1.0	25	.07	1.1	26	.08	2.1	22	.13
23	2.7	23	.13	.96	27	.07	2.0	21	.12
24	6.7	17	.29	.84	27	.06	1.8	21	.10
25	2.2	23	.13	.76	27	.06	1.5	21	.09
26	1.5	25	.10	.73	27	.05	2.3	19	.12
27	1.3	26	.09	.67	28	.05	1.8	19	.09
28	1.1	27	.08	.62	28	.05	1.5	20	.08
29	1.0	27	.07	.64	28	.05	1.1	21	.06
30	.99	27	.07	.63	27	.05	5.6	16	.20
31	---	---	---	1.2	25	.06	---	---	---
TOTAL	53.98	---	3.33	99.00	---	4.96	159.01	---	6.07
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	5.5	14	0.20	0.49	17	0.02	0.27	24	0.02
2	2.5	17	.11	.24	19	.01	.39	24	.02
3	1.3	19	.07	.19	20	.01	.40	22	.02
4	.92	21	.05	.16	21	.01	.23	25	.01
5	.83	22	.05	.16	22	.01	.19	26	.01
6	.70	22	.04	.16	20	.01	.18	26	.01
7	.64	23	.04	.75	17	.03	.45	23	.02
8	.60	23	.04	.26	23	.02	.35	22	.02
9	.57	23	.04	.18	25	.01	.21	25	.01
10	.51	24	.03	.16	26	.01	.20	25	.01
11	.47	24	.03	.32	25	.02	.19	25	.01
12	.45	24	.03	.66	18	.03	.21	25	.01
13	.41	25	.03	.29	22	.02	.19	25	.01
14	.38	25	.03	.21	24	.01	.16	25	.01
15	.37	25	.03	.21	25	.01	.39	22	.02
16	.34	25	.02	.19	26	.01	.24	20	.01
17	.32	26	.02	2.7	18	.08	.10	23	.01
18	.30	26	.02	1.7	18	.08	.10	23	.01
19	.26	26	.02	.57	21	.03	.10	23	.01
20	.27	26	.02	.32	24	.02	.08	24	.00
21	.26	27	.02	.27	25	.02	.08	23	.00
22	.21	26	.01	.26	26	.02	3.7	17	.10
23	2.8	20	.08	.25	26	.02	2.8	16	.11
24	2.3	16	.09	1.3	18	.06	.45	19	.02
25	.41	20	.02	.43	21	.02	.32	22	.02
26	.27	22	.02	.59	22	.03	.25	22	.01
27	.21	23	.01	.32	23	.02	.28	23	.02
28	.18	25	.01	.26	26	.02	.20	23	.01
29	.40	22	.02	.41	25	.03	.17	24	.01
30	.25	20	.01	.37	25	.02	.19	24	.01
31	1.3	14	.04	.46	24	.03	---	---	---
TOTAL	26.23	---	1.25	14.84	---	0.74	13.07	---	0.56
YEAR	701.55		39.02						

## CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.11	46	0.01	3.6	33	0.05	4.0	61	0.64
2	e.11	46	.01	7.5	25	.49	1.9	80	.40
3	e.40	38	.04	3.0	42	.32	1.0	93	.26
4	e.20	43	.02	1.1	52	.16	.93	136	.35
5	e1.0	38	.10	.70	56	.10	.92	105	.26
6	e.50	43	.06	.56	57	.09	.74	100	.20
7	e.30	48	.04	.52	57	.08	.65	100	.18
8	e.22	50	.03	1.3	47	.16	.60	98	.16
9	e.18	51	.03	4.8	19	.19	.54	98	.14
10	e.15	53	.02	4.6	27	.31	.53	98	.14
11	e.14	51	.02	1.7	40	.19	.53	99	.14
12	e.13	49	.02	1.0	50	.14	.56	90	.13
13	e.12	47	.01	.76	55	.11	.53	92	.13
14	e.12	45	.01	.78	206	.44	.51	94	.13
15	e.12	45	.01	1.0	457	1.27	.43	98	.12
16	e.13	46	.02	1.1	272	.78	.38	100	.10
17	e.12	46	.01	.89	191	.46	.29	131	.10
18	e.12	46	.01	.78	147	.31	.28	132	.10
19	e.11	47	.01	.71	132	.25	.28	130	.10
20	e.11	47	.01	.62	117	.20	.29	127	.10
21	e.11	47	.01	.70	108	.20	.26	134	.09
22	e.11	47	.01	4.6	91	1.00	.22	150	.09
23	e.11	56	.01	2.8	86	.63	.20	683	.36
24	.11	69	.02	1.4	95	.35	.18	705	.35
25	.47	50	.04	.90	101	.24	.84	447	.80
26	.21	48	.03	.87	106	.26	1.4	173	.65
27	1.5	33	.11	1.3	107	.37	1.3	141	.47
28	.56	55	.08	.90	100	.24	.69	216	.41
29	.23	65	.04	.72	99	.19	.94	169	.45
30	.17	61	.03	1.1	98	.28	5.8	74	1.13
31	.14	59	.02	---	---	---	2.5	104	.67
TOTAL	8.11	---	0.89	52.31	---	9.86	30.22	---	9.35

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
1	0.95	126	0.32	1.6	136	0.59	4.0	91	0.99
2	.66	132	.23	1.4	139	.52	2.7	105	.75
3	.72	131	.25	1.5	138	.55	2.0	111	.59
4	1.1	111	.34	1.6	130	.57	1.7	115	.52
5	1.3	102	.36	1.4	253	.97	1.5	114	.45
6	1.5	94	.39	1.2	189	.61	1.3	116	.40
7	2.9	75	.54	.98	160	.42	1.2	117	.38
8	6.7	47	.86	.88	150	.36	1.3	111	.38
9	5.3	63	.91	.79	149	.32	9.7	47	1.08
10	3.5	87	.80	.79	142	.30	10	45	1.11
11	2.0	104	.56	.98	133	.35	3.9	71	.75
12	1.5	109	.43	5.8	118	1.67	2.7	82	.59
13	1.5	127	.52	3.3	105	.90	2.0	88	.47
14	1.3	111	.39	1.5	123	.49	2.0	89	.49
15	.91	138	.33	.93	143	.36	1.9	85	.44
16	.94	303	.77	.77	150	.31	1.6	84	.36
17	.97	152	.40	.87	159	.39	1.4	84	.31
18	.94	349	.90	12	167	3.07	1.3	87	.31
19	.90	192	.47	5.4	84	1.18	7.1	47	.76
20	.89	265	.64	3.3	107	.96	5.2	48	.65
21	.81	167	.36	2.5	112	.77	2.9	165	1.26
22	.80	135	.29	2.0	115	.61	2.6	491	3.45
23	1.2	376	1.61	1.7	119	.54	2.6	185	1.30
24	11	169	4.85	9.6	68	1.48	2.9	112	.87
25	7.2	178	3.34	8.9	64	1.44	2.5	101	.69
26	4.4	148	1.75	4.7	98	1.23	2.2	97	.58
27	3.0	141	1.15	3.6	109	1.05	2.0	116	.63
28	2.4	140	.91	2.9	111	.86	1.7	134	.62
29	2.3	132	.83	---	---	---	1.5	137	.57
30	2.2	131	.76	---	---	---	1.4	131	.50
31	1.9	136	.70	---	---	---	1.4	132	.49
TOTAL	73.69	---	26.96	82.89	---	22.87	88.2	---	22.74

e Estimated

CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	1.9	148	0.82	0.95	115	0.29	5.2	46	0.59
2	4.6	89	1.08	3.6	65	.59	1.1	79	.22
3	2.1	102	.57	1.9	78	.39	2.1	62	.32
4	1.5	107	.43	1.9	75	.38	.79	88	.19
5	1.3	110	.38	3.9	60	.59	.57	103	.16
6	1.2	111	.36	10	39	1.05	.49	112	.15
7	1.1	115	.34	7.3	47	.91	3.3	77	.28
8	1.1	115	.34	3.8	71	.72	4.3	43	.50
9	1.7	94	.43	2.6	82	.57	2.1	62	.34
10	2.4	80	.51	14	34	1.20	1.2	83	.27
11	1.2	102	.34	11	40	1.14	1.0	97	.27
12	.98	110	.29	8.4	50	1.07	.96	102	.26
13	.88	115	.27	4.6	68	.84	31	28	1.44
14	.83	117	.26	3.6	75	.72	39	21	2.10
15	.80	121	.26	2.9	79	.62	14	39	1.38
16	.78	118	.25	2.3	83	.52	12	41	1.30
17	1.7	110	.42	2.1	85	.49	6.2	59	.98
18	1.7	88	.40	1.9	87	.45	4.6	65	.81
19	.92	107	.26	1.5	98	.41	3.8	68	.69
20	5.1	52	.64	1.4	103	.38	3.1	73	.61
21	1.7	78	.34	1.2	105	.35	2.5	75	.51
22	1.0	97	.27	1.1	107	.31	2.1	78	.45
23	2.7	87	.40	.96	108	.28	2.0	74	.40
24	6.7	49	.82	.84	110	.25	1.8	70	.34
25	2.2	84	.49	.76	112	.23	1.5	74	.29
26	1.5	99	.39	.73	112	.22	2.3	60	.35
27	1.3	102	.35	.67	115	.21	1.8	62	.29
28	1.1	109	.33	.62	117	.19	1.5	64	.26
29	1.0	110	.30	.64	118	.20	1.1	70	.20
30	.99	113	.30	.63	110	.19	5.6	47	.49
31	---	---	---	1.2	97	.23	---	---	---
TOTAL	53.98	---	12.64	99.00	---	15.99	159.01	---	16.44
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	5.5	34	0.49	0.49	47	0.06	0.27	87	0.06
2	2.5	47	.31	.24	60	.04	.39	91	.08
3	1.3	62	.21	.19	68	.04	.40	77	.08
4	.92	71	.18	.16	73	.03	.23	94	.06
5	.83	75	.17	.16	75	.03	.19	102	.05
6	.70	79	.15	.16	67	.03	.18	103	.05
7	.64	82	.14	.75	49	.08	.45	86	.08
8	.60	84	.14	.26	85	.06	.35	79	.07
9	.57	85	.13	.18	98	.05	.21	94	.05
10	.51	89	.12	.16	104	.05	.20	99	.05
11	.47	92	.12	.32	96	.07	.19	99	.05
12	.45	93	.11	.66	54	.09	.21	96	.05
13	.41	95	.10	.29	79	.06	.19	99	.05
14	.38	95	.10	.21	90	.05	.16	94	.04
15	.37	97	.10	.21	98	.05	.39	81	.05
16	.34	99	.09	.19	102	.05	.24	68	.04
17	.32	101	.09	2.7	60	.17	.10	81	.02
18	.30	101	.08	1.7	55	.23	.10	86	.02
19	.26	105	.07	.57	69	.10	.10	85	.02
20	.27	107	.08	.32	87	.08	.08	88	.02
21	.26	107	.08	.27	97	.07	.08	86	.02
22	.21	105	.06	.26	103	.07	3.7	55	.21
23	2.8	72	.18	.25	105	.07	2.8	42	.29
24	2.3	44	.24	1.3	56	.18	.45	62	.07
25	.41	63	.07	.43	74	.08	.32	75	.06
26	.27	78	.06	.59	75	.11	.25	79	.05
27	.21	86	.05	.32	83	.07	.28	83	.06
28	.18	97	.05	.26	102	.07	.20	85	.05
29	.40	79	.06	.41	95	.10	.17	91	.04
30	.25	64	.04	.37	96	.09	.19	90	.05
31	1.3	39	.10	.46	91	.11	---	---	---
TOTAL	26.23	---	3.97	14.84	---	2.44	13.07	---	1.89
YEAR	701.55	---	146.04	---	---	---	---	---	---

## CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e0.11	78	0.02	3.6	57	0.09	4.0	100	1.11
2	e.11	78	.02	7.5	42	.82	1.9	140	.69
3	e.40	65	.07	3.0	72	.55	1.0	160	.45
4	e.20	74	.04	1.1	89	.27	.93	240	.62
5	e1.0	65	.18	.70	96	.18	.92	180	.46
6	e.50	74	.10	.56	99	.15	.74	180	.35
7	e.30	83	.07	.52	98	.14	.65	180	.31
8	e.22	86	.05	1.3	81	.27	.60	170	.28
9	e.18	88	.04	4.8	33	.32	.54	170	.25
10	e.15	92	.04	4.6	45	.52	.53	170	.25
11	e.14	88	.03	1.7	69	.31	.53	170	.25
12	e.13	84	.03	1.0	86	.24	.56	160	.23
13	e.12	81	.03	.76	95	.19	.53	160	.23
14	e.12	77	.03	.78	370	.80	.51	160	.22
15	e.12	78	.03	1.0	830	2.31	.43	170	.20
16	e.13	78	.03	1.1	490	1.41	.38	180	.18
17	e.12	79	.03	.89	340	.82	.29	230	.18
18	e.12	79	.03	.78	260	.55	.28	230	.17
19	e.11	80	.02	.71	230	.45	.28	230	.17
20	e.11	80	.02	.62	210	.34	.29	220	.17
21	e.11	80	.02	.70	190	.35	.26	240	.17
22	e.11	81	.02	4.6	160	1.74	.22	260	.16
23	e.11	96	.03	2.8	150	1.10	.20	1300	.66
24	.11	120	.04	1.4	170	.61	.18	1300	.65
25	.47	85	.07	.90	180	.43	.84	820	1.45
26	.21	83	.05	.87	190	.45	1.4	310	1.15
27	1.5	56	.19	1.3	190	.65	1.3	250	.82
28	.56	94	.14	.90	170	.42	.69	390	.73
29	.23	110	.07	.72	170	.34	.94	300	.81
30	.17	110	.05	1.1	170	.48	5.8	130	1.97
31	.14	100	.04	---	---	---	2.5	180	1.17
TOTAL	8.11	---	1.63	52.31	---	17.30	30.22	---	16.51
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	0.95	220	0.56	1.6	240	1.04	4.0	160	1.72
2	.66	230	.41	1.4	250	.92	2.7	180	1.31
3	.72	230	.45	1.5	240	.97	2.0	200	1.04
4	1.1	200	.59	1.6	230	1.00	1.7	200	.92
5	1.3	180	.63	1.4	460	1.74	1.5	200	.80
6	1.5	160	.68	1.2	340	1.09	1.3	200	.71
7	2.9	130	.94	.98	280	.75	1.2	210	.66
8	6.7	81	1.47	.88	270	.63	1.3	200	.67
9	5.3	110	1.57	.79	260	.56	9.7	81	1.85
10	3.5	150	1.39	.79	250	.54	10	78	1.90
11	2.0	180	.99	.98	230	.62	3.9	120	1.30
12	1.5	190	.75	5.8	210	2.93	2.7	140	1.03
13	1.5	220	.91	3.3	180	1.58	2.0	150	.82
14	1.3	200	.69	1.5	220	.87	2.0	160	.85
15	.91	240	.59	.93	250	.63	1.9	150	.76
16	.94	550	1.40	.77	270	.55	1.6	150	.63
17	.97	270	.70	.87	280	.68	1.4	150	.54
18	.94	640	1.64	12	300	5.41	1.3	150	.55
19	.90	340	.83	5.4	150	2.06	7.1	80	1.31
20	.89	480	1.14	3.3	190	1.68	5.2	82	1.11
21	.81	300	.65	2.5	200	1.35	2.9	300	2.25
22	.80	240	.51	2.0	200	1.07	2.6	900	6.30
23	1.2	690	2.97	1.7	210	.95	2.6	330	2.31
24	11	300	8.62	9.6	120	2.56	2.9	200	1.52
25	7.2	320	5.94	8.9	110	2.49	2.5	180	1.20
26	4.4	260	3.09	4.7	170	2.14	2.2	170	1.02
27	3.0	250	2.03	3.6	190	1.84	2.0	200	1.10
28	2.4	250	1.61	2.9	190	1.51	1.7	240	1.10
29	2.3	230	1.47	---	---	---	1.5	240	1.01
30	2.2	230	1.34	---	---	---	1.4	230	.88
31	1.9	240	1.23	---	---	---	1.4	230	.85
TOTAL	73.69	---	47.79	82.89	---	40.16	88.2	---	40.02

e Estimated

CHARLES RIVER BASIN

01104420 CAMBRIDGE RESERVOIR, UNNAMED TRIBUTARY 3, NEAR LEXINGTON, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	1.9	260	1.46	0.95	200	0.51	5.2	80	1.01
2	4.6	150	1.88	3.6	110	1.02	1.1	140	.37
3	2.1	180	1.00	1.9	140	.68	2.1	110	.55
4	1.5	190	.75	1.9	130	.66	.79	150	.32
5	1.3	190	.68	3.9	100	1.01	.57	180	.28
6	1.2	200	.63	10	66	1.78	.49	200	.26
7	1.1	200	.59	7.3	81	1.57	3.3	130	.48
8	1.1	200	.61	3.8	120	1.25	4.3	74	.85
9	1.7	160	.75	2.6	140	1.00	2.1	110	.59
10	2.4	140	.88	14	58	2.05	1.2	150	.47
11	1.2	180	.60	11	68	1.94	1.0	170	.47
12	.98	190	.51	8.4	86	1.83	.96	180	.46
13	.88	200	.48	4.6	120	1.45	31	48	2.42
14	.83	210	.46	3.6	130	1.25	39	36	3.53
15	.80	210	.46	2.9	140	1.07	14	66	2.35
16	.78	210	.44	2.3	140	.91	12	70	2.23
17	1.7	190	.73	2.1	150	.85	6.2	100	1.70
18	1.7	150	.69	1.9	150	.78	4.6	110	1.40
19	.92	190	.47	1.5	170	.71	3.8	120	1.19
20	5.1	89	1.10	1.4	180	.66	3.1	130	1.05
21	1.7	140	.59	1.2	180	.61	2.5	130	.89
22	1.0	170	.47	1.1	190	.54	2.1	140	.78
23	2.7	150	.70	.96	190	.49	2.0	130	.70
24	6.7	83	1.40	.84	190	.44	1.8	120	.58
25	2.2	150	.84	.76	200	.40	1.5	130	.51
26	1.5	170	.68	.73	200	.39	2.3	100	.61
27	1.3	180	.62	.67	200	.36	1.8	110	.51
28	1.1	190	.58	.62	210	.34	1.5	110	.45
29	1.0	190	.53	.64	210	.35	1.1	120	.35
30	.99	200	.53	.63	190	.32	5.6	80	.83
31	---	---	---	1.2	170	.40	---	---	---
TOTAL	53.98	---	22.11	99.00	---	27.62	159.01	---	28.19
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	5.5	58	0.82	0.49	81	0.10	0.27	150	0.11
2	2.5	80	.53	.24	100	.07	.39	160	.14
3	1.3	110	.36	.19	120	.06	.40	130	.14
4	.92	120	.31	.16	130	.05	.23	160	.10
5	.83	130	.29	.16	130	.05	.19	180	.09
6	.70	140	.26	.16	120	.05	.18	180	.09
7	.64	140	.24	.75	85	.14	.45	150	.14
8	.60	150	.24	.26	150	.10	.35	140	.13
9	.57	150	.23	.18	170	.08	.21	160	.09
10	.51	160	.21	.16	180	.08	.20	170	.09
11	.47	160	.20	.32	170	.12	.19	170	.09
12	.45	160	.20	.66	93	.16	.21	170	.09
13	.41	170	.18	.29	140	.11	.19	170	.09
14	.38	170	.17	.21	160	.09	.16	160	.07
15	.37	170	.17	.21	170	.09	.39	140	.08
16	.34	170	.16	.19	180	.09	.24	120	.07
17	.32	180	.15	2.7	100	.29	.10	140	.04
18	.30	180	.14	1.7	95	.39	.10	150	.04
19	.26	180	.13	.57	120	.18	.10	150	.04
20	.27	190	.14	.32	150	.13	.08	150	.04
21	.26	190	.13	.27	170	.12	.08	150	.03
22	.21	180	.10	.26	180	.13	3.7	96	.36
23	2.8	130	.31	.25	180	.13	2.8	72	.49
24	2.3	75	.40	1.3	96	.30	.45	110	.12
25	.41	110	.12	.43	130	.14	.32	130	.11
26	.27	140	.10	.59	130	.20	.25	140	.09
27	.21	150	.08	.32	140	.12	.28	140	.11
28	.18	170	.08	.26	180	.13	.20	150	.08
29	.40	140	.11	.41	170	.18	.17	160	.07
30	.25	110	.07	.37	170	.17	.19	160	.08
31	1.3	67	.17	.46	160	.18	---	---	---
TOTAL	26.23	---	6.80	14.84	---	4.23	13.07	---	3.31
YEAR	701.55	---	255.67	---	---	---	---	---	---

CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA

LOCATION.--Lat 42°23'53", Long 71°16'26", Middlesex County, Hydrologic Unit 01090001, 50 ft downstream of culvert on Winter Street, 300 ft downstream of gate house outlet from Cambridge Reservoir, and 1.3 mi north of Kendal Green.

DRAINAGE AREA.--6.86 mi<sup>2</sup>

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge measurements in March to June 1997. July 1997 to September 1998.

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

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Flow effected by regulation of dam 300 ft upstream at outflow of Cambridge Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32 ft<sup>3</sup>/s, June 18, gage height, 1.98 ft, Oct. 10; minimum, 0.02 ft<sup>3</sup>/s, Nov. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	23	17
2	---	---	---	---	---	---	---	---	---	---	23	17
3	---	---	---	---	---	---	---	---	---	---	23	18
4	---	---	---	---	---	---	---	---	---	---	22	18
5	---	---	---	---	---	---	---	---	---	---	22	18
6	---	---	---	---	---	---	---	---	---	---	22	18
7	---	---	---	---	---	---	---	---	---	---	21	18
8	---	---	---	---	---	---	---	---	---	---	21	18
9	---	---	---	---	---	---	---	---	---	---	21	17
10	---	---	---	---	---	---	---	---	---	---	21	17
11	---	---	---	---	---	---	---	---	---	---	21	17
12	---	---	---	---	---	---	---	---	---	---	20	17
13	---	---	---	---	---	---	---	---	---	---	20	17
14	---	---	---	---	---	---	---	---	---	---	20	17
15	---	---	---	---	---	---	---	---	---	26	20	21
16	---	---	---	---	---	---	---	---	---	26	20	25
17	---	---	---	---	---	---	---	---	---	26	19	25
18	---	---	---	---	---	---	---	---	---	26	19	25
19	---	---	---	---	---	---	---	---	---	25	19	25
20	---	---	---	---	---	---	---	---	---	26	19	25
21	---	---	---	---	---	---	---	---	---	25	18	25
22	---	---	---	---	---	---	---	---	---	25	18	25
23	---	---	---	---	---	---	---	---	---	25	18	25
24	---	---	---	---	---	---	---	---	---	25	18	24
25	---	---	---	---	---	---	---	---	---	24	18	24
26	---	---	---	---	---	---	---	---	---	24	18	24
27	---	---	---	---	---	---	---	---	---	25	18	24
28	---	---	---	---	---	---	---	---	---	24	17	24
29	---	---	---	---	---	---	---	---	---	23	18	24
30	---	---	---	---	---	---	---	---	---	23	18	25
31	---	---	---	---	---	---	---	---	---	23	17	---
TOTAL	---	---	---	---	---	---	---	---	---	---	612	634
MEAN	---	---	---	---	---	---	---	---	---	---	19.7	21.1
MAX	---	---	---	---	---	---	---	---	---	---	23	25
MIN	---	---	---	---	---	---	---	---	---	---	17	17

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	---	---	---	---	---	---	---	---	---	---	19.7	21.1
MAX	---	---	---	---	---	---	---	---	---	---	19.7	21.1
(WY)	---	---	---	---	---	---	---	---	---	---	1997	1997
MIN	---	---	---	---	---	---	---	---	---	---	19.7	21.1
(WY)	---	---	---	---	---	---	---	---	---	---	1997	1997



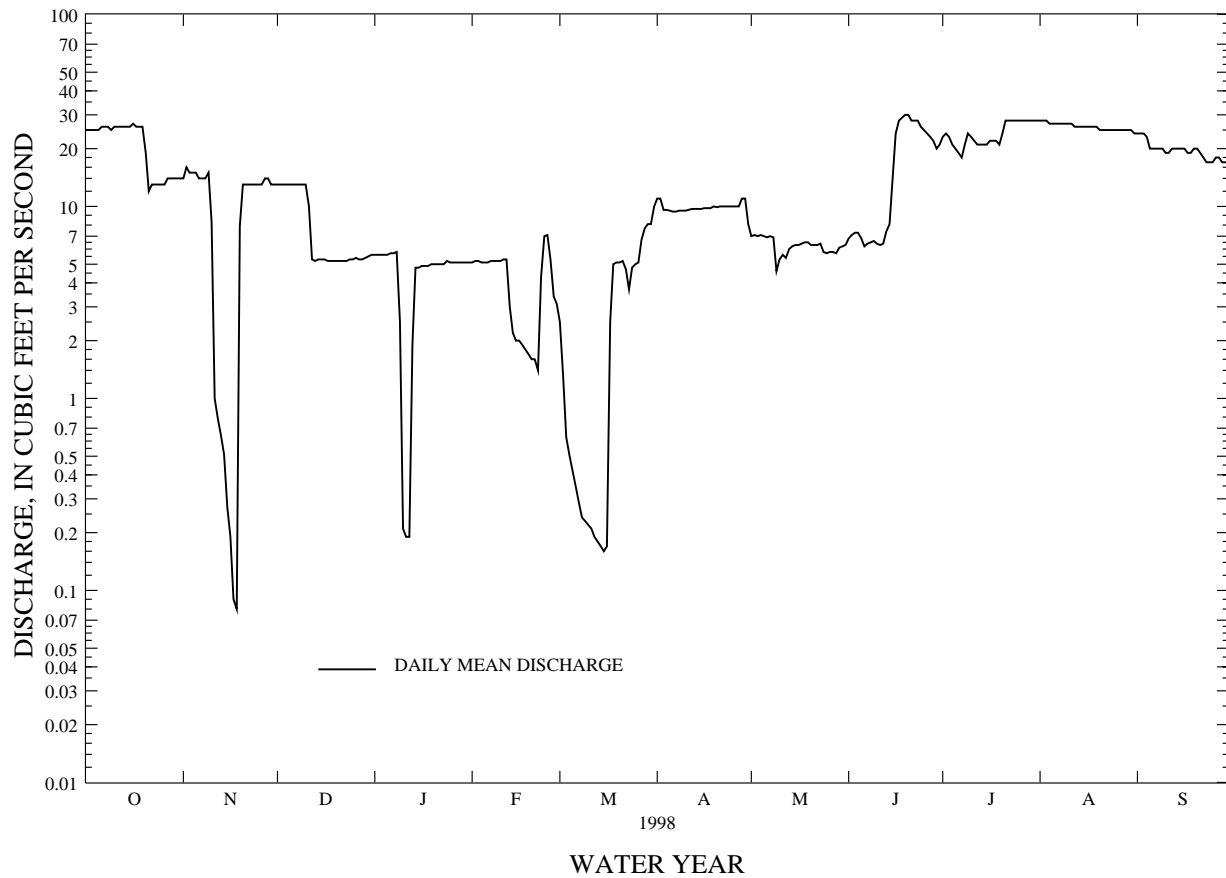


CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

SUMMARY STATISTICS	FOR 1998 WATER YEAR		WATER YEARS 1997 - 1998	
ANNUAL TOTAL	4663.42			
ANNUAL MEAN	12.8		12.8	
HIGHEST ANNUAL MEAN			12.8	1998
LOWEST ANNUAL MEAN			12.8	1998
HIGHEST DAILY MEAN	30	Jun 19	30	Jun 19 1998
LOWEST DAILY MEAN	.08	Nov 18	.08	Nov 18 1997
ANNUAL SEVEN-DAY MINIMUM	.19	Mar 10	.19	Mar 10 1998
INSTANTANEOUS PEAK FLOW	32	Jun 18	32	Jun 18 1998
INSTANTANEOUS PEAK STAGE	1.98	Oct 10	1.98	Oct 10 1997
INSTANTANEOUS LOW FLOW	.02	Nov 17	.02	Nov 17 1997
10 PERCENT EXCEEDS	26		26	
50 PERCENT EXCEEDS	10		14	
90 PERCENT EXCEEDS	2.4		4.4	

HOBBS BROOK BELOW CAMBRIDGE RESERVOIR  
NEAR KENDAL GREEN, MA 01104430



CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to September 1998.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1997 to September 1998.

WATER TEMPERATURE: July 1997 to September 1998.

CALCIUM CONCENTRATION: October 1997 to September 1998.

CALCIUM LOAD: October 1997 to September 1998.

SODIUM CONCENTRATION: October 1997 to September 1998.

SODIUM LOAD: October 1997 to September 1998.

CHLORIDE CONCENTRATION: October 1997 to September 1998.

CHLORIDE LOAD: October 1997 to September 1998.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

REMARKS.--Records good, except those for estimated daily specific conductances, which are poor. Calcium, sodium, and chloride concentrations and loads records are good, except those for which have estimated daily discharge and/or specific conductance.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 687  $\mu$ S/cm, Feb. 4; minimum, 350  $\mu$ S/cm, Mar. 9.

WATER TEMPERATURE: Maximum recorded, 23.7°C, Aug. 28; minimum, 1.4°C, Jan. 22.

CALCIUM CONCENTRATION: Maximum daily mean, 25 mg/L, Feb. 3, 4; minimum daily mean, 15 mg/L, many days.

CALCIUM LOAD: Maximum daily, 1.50 tons, June 19; minimum daily, 0.00 tons, Nov. 17, 18.

SODIUM CONCENTRATION: Maximum daily mean, 98 mg/L, Feb. 3; minimum daily mean, 53 mg/L, several days.

SODIUM LOAD: Maximum daily, 5.45 tons, June 19; minimum daily, 0.01 tons, Nov. 18.

CHLORIDE CONCENTRATION: Maximum daily mean, 180 mg/L, February 3, 4; minimum daily mean, 96 mg/L, September 29, 30.

CHLORIDE LOAD: Maximum daily, 9.91 tons, June 19; minimum daily, 0.03 tons, November 17, 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
21...	1015	12	513	7.1	--	12.5	--	9.9	--	20
22...	1312	8.6	504	7.5	--	12.4	768	--	--	19
27...	1430	14	514	7.1	--	9.4	745	11.7	105	--
NOV										
19...	1000	13	444	7.1	--	3.8	--	12.5	--	--
20...	1400	11	479	7.1	--	4.4	765	--	--	18
22...	1230	13	448	6.8	--	3.9	--	12.3	--	18
DEC										
16...	1215	5.1	515	6.9	4.5	3.2	754	--	--	20
16...	1300	5.2	513	7.0	--	2.6	757	14.7	109	--
JAN										
14...	0900	4.5	544	6.9	-5.4	4.1	769	14.5	110	22
FEB										
11...	1245	6.1	622	--	5.5	3.2	762	--	--	22
MAR										
17...	1430	4.5	570	6.8	5.3	4.5	771	12.1	93	20
24...	0920	5.4	540	7.0	--	3.3	758	--	--	20
APR										
16...	1015	9.1	555	7.0	15.7	11.0	756	--	--	20
MAY										
12...	1400	3.9	564	7.2	16.2	14.0	762	9.9	96	--
19...	0930	5.9	530	7.1	19.3	14.2	750	--	--	19
JUN										
02...	1815	6.9	523	6.9	24.5	15.3	748	--	--	19
JUL										
07...	1430	17	481	7.3	30.9	20.2	759	8.4	94	18
29...	0930	29	463	7.1	27.6	19.9	751	--	--	18
AUG										
11...	1310	27	446	6.7	25.7	21.6	751	7.3	84	--
SEP										
16...	1330	19	455	7.2	24.1	21.6	757	8.1	93	16

## CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
21...	3.6	70	2.0	240	13	130	<0.10	2.1	271	<0.010
22...	--	69	--	--	--	130	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	<.010
NOV										
19...	--	--	--	20	15	--	--	--	--	<.010
20...	--	62	--	--	--	120	--	--	--	--
22...	3.3	61	2.3	--	15	110	<.10	1.9	256	<.010
DEC										
16...	--	67	--	--	--	130	--	--	--	--
16...	--	--	--	--	19	--	--	--	--	<.010
JAN										
14...	3.9	73	2.0	19	19	130	<.10	2.6	286	<.010
FEB										
11...	--	89	--	--	--	160	--	--	--	--
MAR										
17...	3.5	77	1.7	--	16	150	<.10	4.3	304	<.010
24...	--	78	--	--	--	140	--	--	--	--
APR										
16...	--	79	--	--	--	140	--	--	--	<.010
MAY										
12...	--	--	--	--	15	--	--	--	--	<.010
19...	--	74	--	--	--	140	--	--	--	--
JUN										
02...	--	74	--	--	--	130	--	--	--	--
JUL										
07...	3.1	65	1.9	--	11	110	<.10	2.2	257	<.010
29...	--	63	--	--	--	120	--	--	--	--
AUG										
11...	--	--	--	--	9.5	--	--	--	--	.011
SEP										
16...	2.9	62	1.8	--	12	110	<.10	3.0	236	<.010

CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
21...	<0.050	<0.015	0.29	<0.20	<0.010	<0.010	<0.010	13	8.8	4.3
22...	--	--	--	--	--	--	--	--	--	--
27...	<.050	<.015	.32	<.20	<.010	<.010	<.010	--	--	3.6
NOV										
19...	<.050	<.020	.35	.17	.017	<.010	.015	20	33	3.5
20...	--	--	--	--	--	--	--	--	--	--
22...	<.050	<.020	.22	.14	<.010	<.010	.016	22	35	--
DEC										
16...	--	--	--	--	--	--	--	--	--	--
16...	.054	<.020	.32	.19	.010	.011	<.010	56	53	--
JAN										
14...	.139	<.020	.30	.20	<.010	<.010	.010	65	84	--
FEB										
11...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	.260	.031	.26	.16	<.010	<.010	<.001	60	88	3.9
24...	--	--	--	--	--	--	--	--	--	--
APR										
16...	.265	.030	.26	.16	.010	<.010	<.001	--	--	--
MAY										
12...	.179	.054	.35	.25	<.010	<.010	<.001	39	61	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
02...	--	--	--	--	--	--	--	--	--	--
JUL										
07...	<.050	.167	.43	.24	.027	<.010	<.001	61	599	--
29...	--	--	--	--	--	--	--	--	--	--
AUG										
11...	<.050	.127	.48	.53	<.010	<.010	<.001	890	871	--
SEP										
16...	.069	.093	--	--	.024	<.010	<.001	94	102	--

## CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

SPECIFIC CONDUCTANCE ( $\mu\text{S}/\text{CM}$  AT  $25^\circ\text{C}$ ), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	451	450	450	474	472	473
2	---	---	---	---	---	---	451	449	450	474	473	473
3	---	---	---	---	---	---	452	450	451	483	472	474
4	---	---	---	---	---	---	452	450	451	473	471	472
5	---	---	---	---	---	---	451	449	450	472	471	471
6	---	---	---	---	---	---	451	449	450	471	470	471
7	---	---	---	---	---	---	451	449	450	471	469	470
8	---	---	---	---	---	---	451	450	451	470	468	469
9	---	---	---	---	---	---	451	448	449	469	467	468
10	---	---	---	---	---	---	449	448	449	468	462	465
11	---	---	---	---	---	---	449	448	449	462	454	460
12	---	---	---	---	---	---	467	449	459	456	452	454
13	---	---	---	---	---	---	470	465	467	455	449	452
14	---	---	---	---	---	---	479	469	471	456	449	452
15	---	---	---	457	455	456	471	470	470	457	454	455
16	---	---	---	456	454	455	480	469	472	459	453	456
17	---	---	---	455	454	454	481	470	478	479	454	468
18	---	---	---	455	453	453	481	479	479	480	477	479
19	---	---	---	453	451	452	479	469	478	481	479	479
20	---	---	---	452	449	451	478	469	475	480	478	479
21	---	---	---	451	447	449	469	463	466	480	478	479
22	---	---	---	451	447	449	464	463	463	480	478	479
23	---	---	---	451	448	450	463	462	463	479	478	479
24	---	---	---	452	449	450	463	461	462	479	478	479
25	---	---	---	453	450	452	463	462	462	479	478	479
26	---	---	---	452	449	450	462	461	462	479	479	479
27	---	---	---	450	448	449	463	460	461	479	479	479
28	---	---	---	452	448	451	463	462	462	479	478	479
29	---	---	---	453	450	452	473	461	466	479	478	479
30	---	---	---	453	451	452	474	472	473	479	478	479
31	---	---	---	452	450	451	474	472	473	---	---	---
MONTH	---	---	---	---	---	---	481	448	462	483	449	471

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	22.8	22.3	22.5	22.7	22.4	22.5
2	---	---	---	---	---	---	23.0	22.3	22.6	22.6	22.4	22.5
3	---	---	---	---	---	---	23.6	22.6	23.0	23.1	22.3	22.7
4	---	---	---	---	---	---	23.6	23.0	23.3	22.3	21.6	22.0
5	---	---	---	---	---	---	23.3	22.8	23.0	21.6	20.8	21.1
6	---	---	---	---	---	---	23.2	22.7	22.9	20.9	20.5	20.7
7	---	---	---	---	---	---	23.0	22.6	22.8	21.3	20.7	20.8
8	---	---	---	---	---	---	23.1	22.6	22.9	21.3	20.8	21.1
9	---	---	---	---	---	---	22.9	22.6	22.8	21.4	20.5	20.9
10	---	---	---	---	---	---	22.9	22.6	22.7	21.1	20.6	20.8
11	---	---	---	---	---	---	23.2	22.7	22.8	20.7	20.4	20.5
12	---	---	---	---	---	---	23.9	23.0	23.4	20.6	20.3	20.4
13	---	---	---	---	---	---	23.6	23.0	23.2	21.0	20.5	20.6
14	---	---	---	---	---	---	23.5	23.0	23.2	21.4	20.9	21.1
15	---	---	---	21.1	19.6	20.5	23.3	23.1	23.2	21.3	21.0	21.1
16	---	---	---	20.9	20.1	20.5	23.5	23.0	23.2	22.1	21.0	21.5
17	---	---	---	21.3	20.2	20.6	24.2	23.3	23.6	21.9	21.5	21.7
18	---	---	---	21.6	20.5	20.9	24.2	23.8	23.9	21.9	21.4	21.6
19	---	---	---	21.7	20.7	21.1	24.0	23.5	23.8	21.7	21.4	21.6
20	---	---	---	21.9	21.1	21.5	23.9	23.5	23.7	21.6	21.3	21.4
21	---	---	---	22.1	21.6	21.8	23.7	22.6	23.2	21.3	20.6	21.0
22	---	---	---	22.1	21.2	21.7	22.6	22.5	22.5	20.6	19.5	19.9
23	---	---	---	22.5	21.9	22.3	22.5	22.3	22.4	19.5	18.8	19.2
24	---	---	---	22.5	21.9	22.2	22.5	22.1	22.3	18.9	17.9	18.4
25	---	---	---	22.9	22.1	22.6	22.8	22.3	22.5	17.9	17.5	17.6
26	---	---	---	22.1	21.6	21.8	22.7	22.4	22.5	18.1	17.3	17.5
27	---	---	---	21.9	21.6	21.7	22.6	22.3	22.4	17.9	17.0	17.4
28	---	---	---	22.2	21.6	21.9	22.6	22.3	22.5	18.1	17.0	17.4
29	---	---	---	22.7	21.9	22.2	22.6	22.5	22.6	17.6	17.1	17.3
30	---	---	---	23.0	22.2	22.4	22.8	22.4	22.5	17.1	16.9	17.0
31	---	---	---	22.7	22.0	22.4	22.9	22.5	22.7	---	---	---
MONTH	---	---	---	---	---	---	24.2	22.1	22.9	23.1	16.9	20.3

CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	479	478	479	485	464	480	469	449	464	529	518	524
2	480	478	479	475	466	473	469	467	468	530	514	519
3	480	478	479	473	472	473	473	468	470	535	528	532
4	479	478	479	472	471	472	474	472	472	535	529	533
5	479	477	478	472	470	471	474	472	473	542	533	539
6	479	478	478	471	469	470	476	472	474	544	535	541
7	489	478	483	470	466	468	478	475	476	545	540	544
8	489	488	489	466	461	464	479	476	478	543	532	537
9	490	488	489	461	454	457	484	479	481	e532	e426	e529
10	493	490	491	e456	e449	e453	484	482	483	e528	e527	e528
11	493	492	493	e456	e449	e456	485	482	483	e530	e526	e527
12	493	492	493	458	454	456	488	485	486	e526	e525	e526
13	492	492	492	459	455	457	491	488	490	e534	e503	e521
14	495	491	493	461	455	457	493	489	490	515	499	507
15	495	494	495	463	455	458	501	493	497	513	490	500
16	495	494	495	474	458	465	512	500	505	527	511	519
17	495	494	494	e478	e472	e475	510	504	507	526	508	514
18	495	494	495	e473	e466	e469	505	501	503	526	522	523
19	495	493	494	e465	e455	e459	506	497	501	525	523	524
20	494	493	493	465	456	462	503	494	499	526	523	525
21	494	493	493	469	463	466	505	496	502	525	523	524
22	497	491	494	464	456	461	509	498	503	526	523	524
23	496	495	496	465	463	464	514	504	509	527	524	525
24	496	495	495	467	463	465	521	512	518	529	521	526
25	496	491	493	468	464	466	526	512	522	530	525	528
26	493	491	492	469	466	467	529	514	523	536	527	531
27	491	483	486	470	466	468	529	519	526	543	527	534
28	486	484	485	470	467	469	531	521	528	574	543	559
29	485	484	484	471	468	470	530	521	526	595	574	583
30	485	484	485	471	469	470	530	520	524	618	594	604
31	485	484	484	---	---	---	528	519	525	650	618	634
MONTH	497	477	489	485	449	465	531	449	497	650	426	535
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	654	635	645	573	567	570	533	529	532	554	552	553
2	668	648	659	575	569	573	530	529	530	555	550	553
3	686	668	680	573	568	570	530	529	529	555	552	554
4	687	668	678	573	569	573	532	529	530	555	553	554
5	670	614	644	570	560	565	531	529	530	555	552	554
6	614	593	605	568	555	562	530	529	530	555	552	553
7	613	607	610	566	562	564	530	528	529	554	551	553
8	610	605	608	570	559	566	531	528	529	553	549	551
9	612	609	611	562	350	544	533	530	531	551	525	540
10	625	612	617	556	542	549	533	530	531	528	521	524
11	637	625	630	564	551	557	531	530	531	525	521	523
12	638	634	637	575	555	566	533	530	531	526	520	523
13	e667	e618	e631	578	552	567	535	531	533	527	524	526
14	618	585	606	568	552	560	534	532	533	530	524	527
15	618	586	603	567	553	561	535	532	534	528	526	528
16	624	601	611	567	547	559	534	532	533	529	526	527
17	627	603	615	566	546	556	534	532	533	527	526	526
18	628	586	610	552	549	551	535	533	534	528	525	526
19	624	601	617	550	537	543	535	533	534	542	525	534
20	625	606	614	545	540	542	534	532	533	541	539	540
21	622	602	611	547	543	545	533	532	533	541	539	540
22	620	594	607	547	545	546	547	532	539	541	539	540
23	617	601	608	546	542	544	549	545	547	540	538	538
24	609	573	592	543	532	539	545	544	545	540	537	539
25	588	583	585	541	533	537	547	544	545	539	537	538
26	587	579	584	536	530	533	547	545	546	539	537	538
27	586	579	583	537	528	532	549	545	547	539	536	538
28	585	566	578	534	531	532	550	547	548	540	535	537
29	---	---	---	531	529	530	552	548	549	539	536	537
30	---	---	---	530	528	529	553	551	552	541	535	538
31	---	---	---	531	528	529	---	---	---	539	534	537
MONTH	687	566	617	578	350	551	553	528	536	555	520	538

e Estimated

## CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

SPECIFIC CONDUCTANCE ( $\mu\text{S}/\text{CM}$  AT  $25^\circ\text{C}$ ), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	539	533	536	472	465	469	435	424	429	412	408	409
2	545	534	537	474	466	469	433	429	431	411	408	410
3	546	543	544	473	467	469	438	430	432	411	408	409
4	546	542	544	470	467	469	439	432	434	412	409	410
5	544	541	543	474	468	470	437	434	436	413	409	411
6	543	539	541	475	468	472	450	427	436	413	409	411
7	541	534	538	475	468	472	430	414	422	412	409	411
8	537	532	535	482	471	476	418	410	414	413	408	410
9	535	529	532	482	475	479	413	408	411	411	408	410
10	533	529	531	490	472	481	412	408	410	409	406	408
11	533	527	531	486	473	478	415	410	412	408	405	406
12	532	528	530	481	472	478	416	410	413	406	404	405
13	530	520	526	478	471	476	416	412	414	407	404	405
14	525	500	514	477	469	475	417	413	415	405	403	404
15	513	493	505	477	469	474	417	414	416	415	403	409
16	493	484	487	475	466	472	419	415	417	416	413	414
17	485	480	483	475	465	471	419	413	416	415	412	413
18	484	476	480	474	466	471	421	416	417	414	413	413
19	483	468	474	472	467	470	421	417	418	413	411	412
20	474	466	470	472	464	468	421	417	419	412	410	411
21	476	470	472	469	461	466	423	419	421	412	410	411
22	481	463	471	469	458	465	426	419	421	412	400	408
23	489	475	482	466	458	463	424	419	422	403	401	402
24	482	475	479	464	460	462	425	420	422	403	400	401
25	482	476	479	465	457	462	425	421	423	401	400	401
26	482	476	479	465	458	461	433	420	426	401	399	400
27	483	475	479	462	458	461	421	408	414	401	398	399
28	484	476	480	462	457	459	414	406	409	400	398	399
29	485	477	480	486	457	468	410	406	409	400	397	398
30	482	469	476	466	433	446	409	406	407	399	396	397
31	---	---	---	433	426	428	410	407	409	---	---	---
MONTH	546	463	505	490	426	468	450	406	419	416	396	407
YEAR	687	350	502									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.9	16.1	16.6	10.3	8.7	9.4	3.0	2.0	2.5	4.3	4.1	4.2
2	16.3	15.4	15.8	10.4	9.9	10.1	2.3	1.5	1.9	4.4	4.2	4.3
3	15.4	15.0	15.1	10.8	10.3	10.5	2.7	1.7	2.2	4.6	4.4	4.5
4	15.2	14.8	15.0	11.7	10.6	11.1	2.6	2.2	2.4	4.6	4.4	4.5
5	15.2	14.8	15.0	11.5	10.5	10.9	2.7	2.3	2.5	4.5	4.4	4.5
6	15.9	15.0	15.3	11.0	10.1	10.5	2.9	2.5	2.7	4.5	4.4	4.5
7	17.0	15.6	16.1	10.3	9.7	10.0	2.7	2.4	2.5	4.5	4.3	4.4
8	16.7	15.6	16.2	9.7	9.2	9.5	2.7	2.1	2.3	4.3	4.1	4.2
9	16.3	16.1	16.1	9.2	9.0	9.1	2.5	2.1	2.3	---	---	---
10	16.8	16.1	16.4	---	---	---	2.7	2.4	2.5	---	---	---
11	17.2	16.1	16.6	---	---	---	2.9	2.6	2.8	---	---	---
12	16.7	15.7	16.1	8.6	7.6	8.1	3.1	2.9	3.0	---	---	---
13	16.4	15.6	15.9	7.9	6.9	7.4	3.2	2.8	3.0	---	---	---
14	16.6	15.6	16.0	7.0	4.0	5.3	3.4	3.1	3.2	4.5	4.3	4.4
15	16.5	16.0	16.2	4.9	3.9	4.3	3.4	3.0	3.2	4.6	3.1	4.1
16	16.2	15.3	15.7	5.0	3.0	4.0	3.0	2.6	2.8	3.4	2.8	3.2
17	15.9	14.7	15.1	---	---	---	3.2	2.7	3.0	3.2	2.0	2.3
18	15.1	14.2	14.6	---	---	---	3.5	3.2	3.4	2.4	1.6	1.9
19	14.5	13.5	14.0	---	---	---	3.7	3.5	3.6	1.7	1.6	1.7
20	13.8	13.1	13.4	4.5	3.8	4.1	3.9	3.7	3.8	1.8	1.6	1.7
21	13.7	12.7	13.1	4.3	3.8	4.0	4.1	3.8	3.9	1.8	1.5	1.7
22	12.8	11.9	12.4	4.4	3.7	4.1	4.2	4.0	4.1	1.6	1.4	1.5
23	11.9	10.9	11.4	3.7	3.3	3.5	4.2	4.0	4.1	1.7	1.5	1.6
24	11.1	10.3	10.7	3.7	2.7	3.3	4.0	4.0	4.0	2.0	1.7	1.9
25	10.7	9.9	10.4	3.6	2.5	3.1	4.0	4.0	4.0	2.2	2.0	2.1
26	10.4	9.4	9.9	3.4	2.8	3.0	4.0	3.9	4.0	2.5	2.1	2.3
27	9.9	9.6	9.7	3.5	2.5	3.0	4.0	3.9	3.9	2.6	2.3	2.4
28	9.6	9.0	9.4	3.1	2.0	2.7	3.9	3.9	3.9	3.0	2.6	2.8
29	9.0	8.6	8.7	3.0	2.2	2.7	4.1	3.9	4.0	3.0	2.9	3.0
30	9.3	8.3	8.7	3.1	2.7	3.0	4.2	3.9	4.1	3.2	2.9	3.0
31	8.7	8.3	8.5	---	---	---	4.3	4.1	4.2	3.0	2.7	2.8
MONTH	17.2	8.3	13.7	---	---	---	4.3	1.5	3.2	---	---	---

CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.8	2.7	2.7	5.1	4.8	5.0	10.3	8.8	10.1	12.8	12.4	12.6
2	3.0	2.7	2.8	5.0	4.7	4.8	10.3	10.0	10.1	14.5	12.7	13.8
3	3.0	2.8	2.9	5.3	4.9	5.2	10.3	10.1	10.2	14.3	13.2	13.6
4	3.0	2.9	3.0	6.1	4.8	5.2	10.3	9.7	10.0	13.6	13.1	13.3
5	3.0	2.8	2.8	5.7	5.0	5.3	9.7	9.2	9.5	13.6	12.9	13.3
6	3.0	2.4	2.7	6.1	4.7	5.3	9.7	9.1	9.3	13.6	13.0	13.2
7	2.9	2.5	2.7	5.6	5.2	5.4	9.8	9.1	9.2	13.8	13.1	13.4
8	3.0	2.9	3.0	6.2	5.0	5.5	10.0	9.1	9.5	13.6	13.1	13.4
9	3.2	3.0	3.1	7.0	5.5	6.0	10.9	9.6	10.2	16.4	13.1	14.7
10	3.3	3.1	3.2	7.2	5.6	6.3	11.1	10.1	10.7	16.0	14.6	15.3
11	3.3	3.1	3.2	6.3	4.4	5.2	10.7	10.2	10.4	14.6	13.8	14.2
12	3.5	3.3	3.4	5.3	3.1	4.2	11.3	10.1	10.6	14.4	13.5	14.0
13	---	---	---	5.2	2.6	3.7	11.9	10.6	11.1	14.4	13.6	14.0
14	3.7	3.4	3.6	4.6	3.9	4.2	11.7	10.7	11.2	14.2	13.9	14.1
15	4.1	3.3	3.8	4.7	3.6	4.1	11.7	11.1	11.4	14.5	13.8	14.0
16	3.6	3.2	3.3	4.9	3.2	3.9	11.4	11.0	11.3	14.5	13.8	14.1
17	3.8	3.3	3.6	5.2	3.3	4.1	11.5	11.1	11.2	14.4	13.8	14.1
18	3.9	3.4	3.7	4.6	4.2	4.3	11.9	11.0	11.4	14.6	13.9	14.1
19	3.4	3.0	3.1	4.4	4.1	4.3	12.1	11.3	11.7	14.6	14.0	14.3
20	3.4	3.0	3.2	4.1	3.9	4.0	12.6	11.9	12.3	14.6	14.1	14.3
21	3.4	3.2	3.3	3.9	3.2	3.6	12.8	11.9	12.1	14.5	14.1	14.3
22	3.6	3.3	3.4	3.2	2.2	2.7	12.8	12.2	12.4	14.9	14.1	14.4
23	3.7	3.4	3.6	3.5	2.8	3.1	13.5	12.4	12.9	14.9	14.2	14.5
24	3.6	2.9	3.3	4.4	3.3	3.8	12.7	12.3	12.4	15.2	14.2	14.6
25	3.4	2.8	3.0	4.5	3.5	4.0	13.1	12.4	12.6	14.9	14.4	14.6
26	3.6	2.4	3.1	4.7	4.0	4.3	12.6	12.2	12.3	15.3	14.5	14.8
27	4.4	3.0	3.7	5.5	4.6	5.0	13.4	11.9	12.5	15.2	14.6	14.9
28	5.0	3.8	4.3	6.1	5.3	5.8	13.0	12.3	12.5	15.5	14.5	14.9
29	---	---	---	7.7	6.0	6.7	12.5	12.2	12.3	15.4	14.6	15.0
30	---	---	---	8.5	6.8	7.5	12.9	12.4	12.5	16.1	14.6	15.1
31	---	---	---	9.3	7.7	8.3	---	---	---	16.2	14.8	15.1
MONTH	---	---	---	9.3	2.2	4.9	13.5	8.8	11.2	16.4	12.4	14.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.1	14.8	15.4	20.4	19.9	20.1	21.6	20.2	20.7	23.2	22.7	22.8
2	15.9	15.1	15.5	21.4	19.9	20.6	21.0	20.4	20.7	23.3	22.8	22.9
3	15.9	15.0	15.6	22.7	20.3	21.0	21.2	20.3	20.9	23.0	22.6	22.8
4	16.0	15.4	15.7	21.3	19.9	20.5	21.5	20.5	20.9	22.9	22.5	22.7
5	16.4	15.6	15.9	21.7	20.1	20.8	21.2	20.7	21.0	23.0	22.4	22.7
6	16.8	15.9	16.3	21.9	20.3	21.0	21.4	20.6	21.0	22.8	22.4	22.6
7	17.6	16.3	16.7	20.3	19.8	20.0	21.4	20.6	21.1	22.7	22.5	22.6
8	17.3	16.7	16.9	20.0	19.1	19.6	21.5	20.8	21.2	22.9	22.5	22.7
9	17.7	16.8	17.1	19.5	19.0	19.2	21.6	21.0	21.3	22.7	22.0	22.4
10	17.7	16.7	17.1	19.7	18.4	18.9	21.7	21.1	21.5	22.0	21.5	21.7
11	17.5	16.8	17.1	19.1	18.3	18.7	22.2	21.4	21.7	21.5	21.0	21.2
12	17.5	16.9	17.2	18.9	18.3	18.6	23.0	21.6	22.2	21.3	20.9	21.0
13	17.5	16.9	17.2	18.9	18.5	18.6	22.2	21.6	21.8	21.5	21.1	21.3
14	18.1	17.2	17.6	19.0	18.5	18.6	22.1	21.6	21.8	21.4	20.9	21.1
15	18.6	17.5	18.1	19.0	18.4	18.7	22.1	21.6	21.9	21.1	20.8	20.9
16	19.4	18.4	18.9	19.3	18.5	18.7	22.3	21.8	22.0	21.8	20.9	21.3
17	20.0	19.1	19.5	19.2	18.4	18.7	22.5	22.0	22.2	21.4	21.2	21.3
18	21.6	19.3	19.9	19.2	18.5	18.8	22.9	22.0	22.3	21.6	21.1	21.4
19	22.5	19.3	20.7	19.1	18.5	18.8	22.9	22.3	22.6	21.3	20.9	21.1
20	22.1	20.5	21.2	19.4	18.5	18.9	22.6	22.0	22.3	21.1	20.8	21.0
21	22.7	21.0	21.7	19.6	18.9	19.2	22.6	22.0	22.2	21.0	20.8	20.9
22	22.0	19.2	20.6	20.1	19.0	19.3	22.5	22.0	22.3	21.4	21.0	21.2
23	19.7	19.0	19.2	20.1	19.1	19.4	22.5	22.2	22.3	21.1	20.4	20.8
24	21.2	19.5	20.1	19.9	19.2	19.5	22.5	22.1	22.3	20.4	19.5	19.9
25	21.9	19.9	20.8	20.1	19.2	19.5	22.7	22.4	22.6	19.5	19.1	19.3
26	22.1	20.8	21.4	20.0	19.5	19.7	22.8	22.5	22.6	19.6	19.2	19.4
27	22.1	21.0	21.6	20.0	19.5	19.7	23.3	22.4	22.8	19.7	19.4	19.5
28	21.4	19.7	20.9	20.3	19.6	19.9	23.7	22.7	23.0	20.0	19.4	19.7
29	20.0	19.0	19.6	21.0	19.7	20.1	23.6	22.9	23.2	19.9	19.4	19.6
30	20.1	19.4	19.7	20.9	20.2	20.5	23.1	22.8	22.9	19.5	19.2	19.3
31	---	---	---	20.8	20.3	20.6	23.1	22.8	22.9	---	---	---
MONTH	22.7	14.8	18.5	22.7	18.3	19.6	23.7	20.2	21.9	23.3	19.1	21.2



## CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	25	18	1.19	14	18	0.70	13	17	0.62
2	25	18	1.21	16	18	.75	13	18	.63
3	25	18	1.21	15	18	.73	13	18	.63
4	25	18	1.21	15	18	.72	13	18	.64
5	25	18	1.22	15	18	.70	13	18	.63
6	26	18	1.24	14	18	.66	13	18	.63
7	26	18	1.27	14	18	.67	13	18	.62
8	26	18	1.27	14	17	.67	13	18	.62
9	25	18	1.26	15	17	.68	13	18	.63
10	26	18	1.29	8.3	17	.38	13	18	.63
11	26	18	1.31	1.0	17	.05	10	18	.50
12	26	18	1.30	.78	17	.04	5.3	18	.26
13	26	18	1.29	.64	17	.03	5.2	18	.26
14	26	18	1.32	.51	17	.02	5.3	18	.26
15	26	19	1.32	.27	17	.01	5.3	19	.26
16	27	19	1.33	.19	17	.01	5.3	19	.27
17	26	19	1.32	.09	18	.00	5.2	19	.27
18	26	19	1.29	.08	18	.00	5.2	19	.26
19	26	19	1.29	7.9	17	.37	5.2	19	.26
20	19	18	.96	13	17	.61	5.2	19	.26
21	12	18	.62	13	18	.61	5.2	19	.26
22	13	19	.64	13	17	.61	5.2	19	.26
23	13	19	.67	13	17	.61	5.2	19	.27
24	13	19	.66	13	17	.61	5.3	19	.28
25	13	18	.66	13	18	.62	5.3	20	.28
26	13	18	.66	13	18	.62	5.4	20	.28
27	14	18	.67	14	18	.64	5.3	20	.28
28	14	18	.69	14	18	.65	5.3	20	.28
29	14	18	.69	13	18	.63	5.4	20	.28
30	14	18	.68	13	18	.62	5.5	20	.31
31	14	18	.68	---	---	---	5.6	20	.34
TOTAL	655	---	32.42	296.76	---	14.02	245.9	---	12.26
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	5.6	20	.34	5.1	24	.37	2.5	21	.14
2	5.6	19	.34	5.2	24	.38	1.3	21	.08
3	5.6	20	.34	5.2	25	.39	.63	21	.04
4	5.6	20	.35	5.1	25	.39	.51	21	.03
5	5.6	20	.35	5.1	24	.37	.42	21	.02
6	5.7	20	.35	5.1	22	.35	.35	21	.02
7	5.7	20	.36	5.2	23	.35	.29	21	.02
8	5.8	20	.36	5.2	23	.35	.24	21	.01
9	2.5	20	.15	5.2	23	.36	.23	20	.01
10	.21	20	.01	5.2	23	.36	.22	20	.01
11	.19	20	.01	5.3	23	.37	.21	21	.01
12	.19	20	.01	5.3	24	.38	.19	21	.01
13	1.9	19	.10	3.0	23	.20	.18	21	.01
14	4.8	19	.27	2.2	22	.13	.17	21	.01
15	4.8	19	.27	2.0	22	.12	.16	21	.01
16	4.9	19	.28	2.0	23	.12	.17	21	.01
17	4.9	19	.28	1.9	23	.12	2.5	21	.15
18	4.9	20	.29	1.8	23	.11	5.0	21	.31
19	5.0	20	.29	1.7	23	.11	5.1	20	.31
20	5.0	20	.29	1.6	23	.10	5.1	20	.31
21	5.0	20	.29	1.6	23	.10	5.2	20	.32
22	5.0	20	.29	1.4	23	.09	4.7	20	.28
23	5.0	20	.29	4.3	23	.30	3.7	20	.20
24	5.2	20	.31	7.0	22	.48	4.8	20	.28
25	5.1	20	.30	7.1	22	.48	5.0	20	.30
26	5.1	20	.30	5.3	22	.34	5.1	20	.31
27	5.1	20	.30	3.4	22	.20	6.7	20	.41
28	5.1	21	.32	3.1	22	.18	7.7	20	.42
29	5.1	22	.33	---	---	---	8.1	20	.39
30	5.1	22	.35	---	---	---	8.1	20	.39
31	5.1	24	.36	---	---	---	10	20	.52
TOTAL	140.39	---	8.48	111.6	---	7.60	94.57	---	5.34

CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	11	20	.58	7.0	21	.35	6.8	20	.34
2	11	20	.55	7.1	21	.36	7.1	20	.35
3	9.6	20	.47	7.0	21	.36	7.3	20	.36
4	9.6	20	.47	7.1	21	.36	7.3	20	.36
5	9.5	20	.46	7.0	21	.35	6.8	20	.34
6	9.4	20	.46	6.9	21	.35	6.2	20	.31
7	9.4	20	.46	7.0	21	.35	6.4	20	.32
8	9.5	20	.46	6.9	21	.35	6.5	20	.32
9	9.5	20	.47	4.6	20	.24	6.6	20	.32
10	9.5	20	.47	5.3	20	.26	6.4	20	.31
11	9.6	20	.47	5.6	20	.27	6.3	20	.31
12	9.7	20	.48	5.4	20	.26	6.4	20	.31
13	9.7	20	.48	6.0	20	.29	7.4	20	.35
14	9.7	20	.48	6.2	20	.30	8.1	19	.38
15	9.7	20	.48	6.3	20	.31	14	19	.71
16	9.8	20	.48	6.3	20	.31	24	18	1.23
17	9.8	20	.49	6.4	20	.31	28	18	1.42
18	9.8	20	.49	6.5	20	.31	29	18	1.46
19	10	20	.50	6.5	20	.32	30	18	1.50
20	9.9	20	.49	6.3	20	.31	30	18	1.46
21	10	20	.49	6.3	20	.31	28	18	1.40
22	10	20	.50	6.3	20	.31	28	18	1.39
23	10	20	.51	6.4	20	.31	28	18	1.41
24	10	20	.51	5.8	20	.29	26	18	1.33
25	10	20	.51	5.7	20	.29	25	18	1.27
26	10	20	.52	5.8	20	.29	24	18	1.23
27	10	20	.53	5.8	20	.29	23	18	1.18
28	11	20	.54	5.7	20	.28	22	18	1.13
29	11	20	.55	6.1	20	.30	20	18	1.06
30	8.1	21	.41	6.2	20	.31	21	18	1.07
31	---	---	---	6.3	20	.31	---	---	---
TOTAL	295.8	---	14.76	193.8	---	9.61	495.6	---	24.93

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	23	18	1.18	28	16	1.25	24	15	1.07
2	24	18	1.20	28	16	1.26	24	15	1.06
3	23	18	1.14	28	16	1.26	24	15	1.05
4	21	18	1.08	27	16	1.26	23	15	1.00
5	20	18	1.02	27	16	1.26	20	16	.90
6	19	18	.97	27	16	1.24	20	16	.90
7	18	18	.90	27	16	1.20	20	16	.90
8	21	18	1.09	27	16	1.18	20	15	.89
9	24	18	1.21	27	16	1.16	20	15	.89
10	23	18	1.17	27	16	1.16	19	15	.87
11	22	18	1.12	27	16	1.17	19	15	.87
12	21	18	1.11	26	16	1.16	20	15	.87
13	21	18	1.10	26	16	1.16	20	15	.88
14	21	18	1.10	26	16	1.16	20	15	.87
15	21	18	1.10	26	16	1.15	20	15	.88
16	22	18	1.11	26	16	1.15	20	16	.89
17	22	18	1.10	26	16	1.15	19	16	.88
18	22	18	1.10	26	16	1.15	19	16	.88
19	21	18	1.07	26	16	1.14	20	16	.88
20	24	18	1.18	25	16	1.14	20	16	.88
21	28	17	1.37	25	16	1.14	19	16	.85
22	28	17	1.36	25	16	1.13	18	15	.80
23	28	17	1.36	25	16	1.14	17	15	.76
24	28	17	1.35	25	16	1.15	17	15	.76
25	28	17	1.35	25	16	1.14	17	15	.76
26	28	17	1.36	25	16	1.13	18	15	.76
27	28	17	1.37	25	16	1.10	18	15	.76
28	28	17	1.36	25	15	1.09	17	15	.76
29	28	18	1.37	25	15	1.08	17	15	.76
30	28	17	1.31	25	15	1.07	17	15	.75
31	28	16	1.26	24	15	1.08	---	---	---
TOTAL	741	---	36.87	807	---	36.01	586	---	26.03
YEAR	4663.42		228.33						

## CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	25	65	4.34	14	65	2.54	13	63	2.24
2	25	65	4.41	16	64	2.71	13	64	2.30
3	25	65	4.41	15	64	2.64	13	64	2.30
4	25	65	4.41	15	64	2.61	13	64	2.31
5	25	65	4.45	15	64	2.54	13	65	2.27
6	26	65	4.51	14	64	2.40	13	65	2.27
7	26	66	4.63	14	64	2.41	13	65	2.26
8	26	67	4.64	14	63	2.44	13	65	2.24
9	25	67	4.59	15	62	2.44	13	66	2.28
10	26	67	4.72	8.3	62	1.36	13	66	2.28
11	26	68	4.79	1.0	61	.17	10	66	1.80
12	26	68	4.77	.78	62	.13	5.3	66	.94
13	26	67	4.73	.64	62	.11	5.2	67	.95
14	26	68	4.82	.51	62	.08	5.3	67	.95
15	26	68	4.84	.27	62	.04	5.3	68	.97
16	27	68	4.87	.19	63	.03	5.3	69	.99
17	26	68	4.82	.09	65	.02	5.2	70	.98
18	26	68	4.73	.08	64	.01	5.2	69	.97
19	26	68	4.71	7.9	62	1.33	5.2	69	.96
20	19	68	3.50	13	63	2.19	5.2	69	.96
21	12	68	2.26	13	63	2.22	5.2	69	.96
22	13	68	2.35	13	63	2.21	5.2	69	.96
23	13	68	2.45	13	63	2.22	5.2	70	.99
24	13	68	2.43	13	63	2.21	5.3	72	1.02
25	13	68	2.43	13	63	2.22	5.3	72	1.04
26	13	67	2.42	13	64	2.23	5.4	72	1.04
27	14	67	2.46	14	64	2.34	5.3	73	1.04
28	14	66	2.51	14	64	2.34	5.3	73	1.04
29	14	66	2.51	13	64	2.30	5.4	73	1.05
30	14	66	2.47	13	64	2.26	5.5	72	1.16
31	14	66	2.47	---	---	---	5.6	73	1.28
TOTAL	655	---	118.45	296.76	---	50.75	245.9	---	44.80
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	5.6	73	1.27	5.1	92	1.43	2.5	80	0.54
2	5.6	72	1.25	5.2	94	1.47	1.3	80	.29
3	5.6	74	1.28	5.2	98	1.53	.63	80	.14
4	5.6	74	1.29	5.1	97	1.51	.51	80	.11
5	5.6	75	1.31	5.1	92	1.42	.42	79	.09
6	5.7	75	1.32	5.1	85	1.33	.35	79	.08
7	5.7	76	1.34	5.2	86	1.35	.29	79	.06
8	5.8	75	1.35	5.2	86	1.34	.24	79	.05
9	2.5	73	.55	5.2	86	1.36	.23	76	.05
10	.21	73	.04	5.2	87	1.39	.22	76	.05
11	.19	73	.04	5.3	90	1.43	.21	78	.04
12	.19	73	.04	5.3	91	1.48	.19	79	.04
13	1.9	72	.39	3.0	90	.79	.18	79	.04
14	4.8	70	.98	2.2	86	.50	.17	78	.04
15	4.8	69	.98	2.0	85	.46	.16	78	.03
16	4.9	72	1.03	2.0	86	.46	.17	78	.04
17	4.9	71	1.04	1.9	87	.44	2.5	78	.56
18	4.9	72	1.06	1.8	86	.42	5.0	77	1.14
19	5.0	73	1.07	1.7	87	.41	5.1	76	1.17
20	5.0	73	1.07	1.6	87	.38	5.1	75	1.17
21	5.0	73	1.08	1.6	86	.37	5.2	76	1.20
22	5.0	72	1.07	1.4	86	.33	4.7	76	1.05
23	5.0	73	1.08	4.3	86	1.15	3.7	76	.76
24	5.2	73	1.14	7.0	83	1.82	4.8	75	1.06
25	5.1	73	1.11	7.1	82	1.82	5.0	75	1.12
26	5.1	74	1.12	5.3	82	1.29	5.1	74	1.15
27	5.1	74	1.13	3.4	82	.75	6.7	74	1.54
28	5.1	78	1.19	3.1	81	.67	7.7	74	1.58
29	5.1	82	1.25	---	---	---	8.1	73	1.45
30	5.1	85	1.32	---	---	---	8.1	73	1.45
31	5.1	90	1.40	---	---	---	10	73	1.93
TOTAL	140.39	---	31.59	111.6	---	29.10	94.57	---	20.02

CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	11	74	2.16	7.0	77	1.32	6.8	74	1.25
2	11	73	2.03	7.1	77	1.34	7.1	75	1.29
3	9.6	73	1.75	7.0	77	1.33	7.3	76	1.35
4	9.6	74	1.74	7.1	77	1.34	7.3	76	1.35
5	9.5	73	1.72	7.0	77	1.32	6.8	75	1.26
6	9.4	73	1.70	6.9	77	1.30	6.2	75	1.16
7	9.4	73	1.71	7.0	77	1.31	6.4	75	1.18
8	9.5	73	1.71	6.9	77	1.29	6.5	74	1.19
9	9.5	74	1.73	4.6	75	.89	6.6	74	1.19
10	9.5	74	1.74	5.3	73	.97	6.4	74	1.16
11	9.6	74	1.75	5.6	72	1.01	6.3	74	1.14
12	9.7	74	1.78	5.4	72	.98	6.4	73	1.15
13	9.7	74	1.78	6.0	73	1.08	7.4	73	1.32
14	9.7	74	1.78	6.2	73	1.11	8.1	71	1.39
15	9.7	74	1.79	6.3	73	1.13	14	69	2.61
16	9.8	74	1.79	6.3	73	1.13	24	67	4.48
17	9.8	74	1.80	6.4	73	1.14	28	66	5.18
18	9.8	74	1.81	6.5	73	1.16	29	66	5.31
19	10	74	1.86	6.5	74	1.19	30	65	5.45
20	9.9	74	1.82	6.3	75	1.16	30	64	5.30
21	10	74	1.83	6.3	75	1.16	28	64	5.08
22	10	75	1.87	6.3	75	1.15	28	64	5.05
23	10	76	1.91	6.4	75	1.17	28	66	5.15
24	10	76	1.91	5.8	75	1.09	26	65	4.86
25	10	76	1.92	5.7	75	1.07	25	65	4.61
26	10	76	1.93	5.8	75	1.07	24	65	4.46
27	10	76	1.97	5.8	75	1.07	23	65	4.31
28	11	76	2.02	5.7	75	1.05	22	66	4.10
29	11	77	2.05	6.1	75	1.12	20	66	3.85
30	8.1	77	1.54	6.2	75	1.15	21	65	3.90
31	---	---	---	6.3	75	1.16	---	---	---
TOTAL	295.8	---	54.90	193.8	---	35.76	495.6	---	91.08
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	23	64	4.27	28	58	4.45	24	55	3.79
2	24	64	4.34	28	58	4.49	24	55	3.76
3	23	64	4.14	28	58	4.50	24	55	3.71
4	21	64	3.91	27	59	4.51	23	55	3.54
5	20	64	3.72	27	59	4.51	20	55	3.19
6	19	64	3.52	27	59	4.44	20	55	3.18
7	18	64	3.26	27	56	4.27	20	55	3.18
8	21	65	3.97	27	55	4.18	20	55	3.16
9	24	65	4.39	27	55	4.12	20	55	3.13
10	23	66	4.27	27	55	4.11	19	54	3.06
11	22	65	4.09	27	55	4.13	19	54	3.06
12	21	65	4.03	26	55	4.12	20	54	3.08
13	21	65	3.99	26	55	4.10	20	54	3.09
14	21	65	3.98	26	55	4.12	20	54	3.06
15	21	65	3.98	26	56	4.08	20	55	3.12
16	22	64	4.01	26	56	4.08	20	55	3.14
17	22	64	4.00	26	56	4.07	19	55	3.12
18	22	64	3.97	26	56	4.07	19	55	3.12
19	21	64	3.88	26	56	4.05	20	55	3.13
20	24	64	4.27	25	56	4.05	20	55	3.13
21	28	63	4.95	25	56	4.04	19	55	2.99
22	28	63	4.92	25	56	4.02	18	54	2.82
23	28	63	4.90	25	57	4.05	17	53	2.69
24	28	63	4.87	25	57	4.07	17	53	2.68
25	28	63	4.87	25	57	4.07	17	53	2.68
26	28	63	4.91	25	57	4.01	18	53	2.68
27	28	63	4.94	25	55	3.88	18	53	2.69
28	28	62	4.90	25	55	3.84	17	53	2.66
29	28	64	4.96	25	55	3.81	17	53	2.66
30	28	60	4.70	25	54	3.79	17	53	2.64
31	28	58	4.49	24	55	3.80	---	---	---
TOTAL	741	---	133.40	807	---	127.83	586	---	91.94
YEAR	4663.42		829.62						

## CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	25	120	7.89	14	120	4.63	13	110	4.08
2	25	120	8.02	16	120	4.93	13	120	4.19
3	25	120	8.02	15	120	4.80	13	120	4.19
4	25	120	8.03	15	120	4.75	13	120	4.21
5	25	120	8.10	15	120	4.62	13	120	4.14
6	26	120	8.21	14	120	4.36	13	120	4.14
7	26	120	8.42	14	120	4.39	13	120	4.12
8	26	120	8.44	14	110	4.44	13	120	4.09
9	25	120	8.36	15	110	4.44	13	120	4.14
10	26	120	8.59	8.3	110	2.48	13	120	4.15
11	26	120	8.72	1.0	110	.30	10	120	3.28
12	26	120	8.68	.78	110	.24	5.3	120	1.72
13	26	120	8.61	.64	110	.19	5.2	120	1.73
14	26	120	8.78	.51	110	.15	5.3	120	1.73
15	26	120	8.80	.27	110	.08	5.3	120	1.77
16	27	120	8.86	.19	120	.06	5.3	130	1.80
17	26	120	8.77	.09	120	.03	5.2	130	1.79
18	26	120	8.61	.08	120	.03	5.2	130	1.76
19	26	120	8.57	7.9	110	2.42	5.2	130	1.75
20	19	120	6.37	13	110	4.00	5.2	120	1.74
21	12	120	4.11	13	120	4.04	5.2	130	1.75
22	13	120	4.28	13	110	4.02	5.2	130	1.75
23	13	120	4.46	13	110	4.03	5.2	130	1.80
24	13	120	4.43	13	120	4.03	5.3	130	1.86
25	13	120	4.42	13	120	4.05	5.3	130	1.89
26	13	120	4.40	13	120	4.05	5.4	130	1.90
27	14	120	4.48	14	120	4.25	5.3	130	1.90
28	14	120	4.56	14	120	4.27	5.3	130	1.90
29	14	120	4.57	13	120	4.19	5.4	130	1.91
30	14	120	4.50	13	120	4.12	5.5	130	2.11
31	14	120	4.50	---	---	---	5.6	130	2.32
TOTAL	655	---	215.56	296.76	---	92.39	245.9	---	81.61

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	5.6	130	2.31	5.1	170	2.60	2.5	150	.98
2	5.6	130	2.28	5.2	170	2.67	1.3	150	.52
3	5.6	130	2.33	5.2	180	2.78	.63	150	.25
4	5.6	130	2.35	5.1	180	2.75	.51	150	.20
5	5.6	140	2.38	5.1	170	2.58	.42	140	.16
6	5.7	140	2.41	5.1	160	2.41	.35	140	.14
7	5.7	140	2.43	5.2	160	2.45	.29	140	.11
8	5.8	140	2.45	5.2	160	2.44	.24	140	.09
9	2.5	130	1.00	5.2	160	2.47	.23	140	.09
10	.21	130	.08	5.2	160	2.53	.22	140	.08
11	.19	130	.07	5.3	160	2.61	.21	140	.08
12	.19	130	.07	5.3	160	2.69	.19	140	.07
13	1.9	130	.70	3.0	160	1.43	.18	140	.07
14	4.8	130	1.78	2.2	160	.92	.17	140	.06
15	4.8	130	1.78	2.0	150	.84	.16	140	.06
16	4.9	130	1.88	2.0	160	.84	.17	140	.06
17	4.9	130	1.89	1.9	160	.80	2.5	140	1.02
18	4.9	130	1.94	1.8	160	.76	5.0	140	2.08
19	5.0	130	1.95	1.7	160	.74	5.1	140	2.14
20	5.0	130	1.96	1.6	160	.69	5.1	140	2.13
21	5.0	130	1.96	1.6	160	.68	5.2	140	2.18
22	5.0	130	1.95	1.4	160	.60	4.7	140	1.91
23	5.0	130	1.96	4.3	160	2.08	3.7	140	1.38
24	5.2	130	2.07	7.0	150	3.31	4.8	140	1.92
25	5.1	130	2.02	7.1	150	3.31	5.0	140	2.05
26	5.1	130	2.03	5.3	150	2.35	5.1	130	2.09
27	5.1	130	2.05	3.4	150	1.36	6.7	130	2.80
28	5.1	140	2.16	3.1	150	1.22	7.7	130	2.87
29	5.1	150	2.28	---	---	---	8.1	130	2.64
30	5.1	160	2.39	---	---	---	8.1	130	2.63
31	5.1	160	2.54	---	---	---	10	130	3.51
TOTAL	140.39	---	57.45	111.6	---	52.91	94.57	---	36.37

CHARLES RIVER BASIN

01104430 HOBBS BROOK BELOW CAMBRIDGE RESERVOIR NEAR KENDAL GREEN, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	11	130	3.93	7.0	140	2.41	6.8	140	2.27
2	11	130	3.69	7.1	140	2.44	7.1	140	2.36
3	9.6	130	3.18	7.0	140	2.42	7.3	140	2.46
4	9.6	130	3.16	7.1	140	2.43	7.3	140	2.45
5	9.5	130	3.13	7.0	140	2.39	6.8	140	2.29
6	9.4	130	3.10	6.9	140	2.37	6.2	140	2.11
7	9.4	130	3.11	7.0	140	2.38	6.4	140	2.15
8	9.5	130	3.12	6.9	140	2.36	6.5	140	2.16
9	9.5	130	3.14	4.6	140	1.63	6.6	130	2.16
10	9.5	130	3.16	5.3	130	1.77	6.4	130	2.12
11	9.6	130	3.18	5.6	130	1.85	6.3	130	2.08
12	9.7	130	3.23	5.4	130	1.78	6.4	130	2.10
13	9.7	130	3.24	6.0	130	1.96	7.4	130	2.39
14	9.7	130	3.23	6.2	130	2.03	8.1	130	2.54
15	9.7	130	3.26	6.3	130	2.06	14	130	4.76
16	9.8	130	3.26	6.3	130	2.06	24	120	8.16
17	9.8	130	3.29	6.4	130	2.08	28	120	9.43
18	9.8	130	3.29	6.5	130	2.11	29	120	9.67
19	10	130	3.38	6.5	130	2.16	30	120	9.91
20	9.9	130	3.31	6.3	140	2.11	30	120	9.65
21	10	130	3.33	6.3	140	2.11	28	120	9.24
22	10	140	3.40	6.3	140	2.10	28	120	9.19
23	10	140	3.47	6.4	140	2.13	28	120	9.38
24	10	140	3.48	5.8	140	1.97	26	120	8.84
25	10	140	3.49	5.7	140	1.95	25	120	8.39
26	10	140	3.51	5.8	140	1.95	24	120	8.12
27	10	140	3.58	5.8	140	1.95	23	120	7.85
28	11	140	3.67	5.7	140	1.92	22	120	7.46
29	11	140	3.74	6.1	140	2.04	20	120	7.00
30	8.1	140	2.81	6.2	140	2.09	21	120	7.10
31	---	---	---	6.3	140	2.11	---	---	---
TOTAL	295.8	---	99.87	193.8	---	65.12	495.6	---	165.79
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	23	120	7.77	28	100	8.10	24	99	6.91
2	24	120	7.90	28	110	8.17	24	100	6.84
3	23	120	7.54	28	110	8.19	24	100	6.75
4	21	120	7.12	27	110	8.21	23	100	6.45
5	20	120	6.77	27	110	8.21	20	100	5.81
6	19	120	6.40	27	110	8.09	20	100	5.79
7	18	120	5.93	27	100	7.78	20	100	5.79
8	21	120	7.22	27	100	7.60	20	100	5.75
9	24	120	8.00	27	100	7.49	20	100	5.70
10	23	120	7.78	27	100	7.49	19	99	5.58
11	22	120	7.44	27	100	7.52	19	99	5.58
12	21	120	7.33	26	100	7.51	20	98	5.61
13	21	120	7.26	26	100	7.46	20	98	5.62
14	21	120	7.24	26	100	7.49	20	98	5.58
15	21	120	7.25	26	100	7.43	20	100	5.67
16	22	120	7.31	26	100	7.43	20	100	5.72
17	22	120	7.28	26	100	7.42	19	100	5.69
18	22	120	7.23	26	100	7.40	19	100	5.67
19	21	120	7.06	26	100	7.38	20	100	5.69
20	24	120	7.78	25	100	7.37	20	100	5.70
21	28	120	9.02	25	100	7.35	19	100	5.45
22	28	120	8.96	25	100	7.32	18	99	5.14
23	28	110	8.92	25	100	7.38	17	97	4.89
24	28	110	8.87	25	100	7.42	17	97	4.89
25	28	110	8.86	25	100	7.40	17	97	4.88
26	28	110	8.94	25	100	7.31	18	97	4.89
27	28	110	8.99	25	100	7.07	18	97	4.90
28	28	110	8.93	25	99	6.99	17	97	4.84
29	28	120	9.03	25	99	6.94	17	96	4.85
30	28	110	8.55	25	99	6.90	17	96	4.80
31	28	100	8.17	24	99	6.91	---	---	---
TOTAL	741	---	242.85	807	---	232.73	586	---	167.43
YEAR	4663.42		1510.08						

CHARLES RIVER BASIN

01104433 HOBBS BROOK, UNNAMED TRIBUTARY 1 NEAR KENDAL GREEN, MA

LOCATION.--Lat 42°23'28", Long 71°16'18", Middlesex County, Hydrologic Unit 01090001, a culvert on Lexington Street, 1,700 ft upstream of mouth, and 1.0 mi northeast of Kendal Green.

DRAINAGE AREA.--0.4 mi<sup>2</sup>.

REMARKS.--Drainage area is approximate and may contain more or less area contribution from storm drains.

PERIOD OF RECORD.--October 1997 to September 1998.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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-AIRE (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 SATUR-ATION (00301)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT										
23...	0945	0.02	1160	6.9	3.7	3.7	760	0.9	7	62
27...	1500	--	187	6.4	--	9.4	745	8.3	74	--
NOV										
06...	1045	.12	830	6.8	--	8.6	771	4.8	41	--
19...	1145	.11	1340	6.7	--	5.1	761	7.5	59	51
22...	1315	--	303	6.3	--	4.4	757	11.8	92	9.1
DEC										
16...	1400	.06	1370	6.9	--	1.4	757	7.8	56	61
JAN										
15...	0900	.07	1320	5.9	--	1.5	771	6.1	43	56
MAR										
26...	0930	.43	1420	6.5	8.8	6.6	769	11.8	96	48
MAY										
14...	0930	.57	908	6.1	11.9	11.4	764	8.2	75	39
JUL										
09...	0930	.17	1150	7.0	20.6	17.1	753	6.0	63	52
AUG										
13...	0845	.10	581	6.3	17.0	18.0	764	4.3	45	26
17...	0900	--	941	7.7	24.6	19.5	760	4.4	48	--
SEP										
17...	0900	.12	541	6.4	14.4	15.7	759	5.5	56	26

DATE	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)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT										
23...	11	145	6.8	100	23	290	0.13	13	650	<0.010
27...	--	--	--	--	--	--	--	--	--	.010
NOV										
06...	--	--	--	--	--	--	--	--	--	--
19...	7.6	182	28	60	24	370	<.10	10	769	<.010
22...	1.3	45	3.3	--	7.2	81	<.10	2.3	176	.013
DEC										
16...	11	165	6.6	--	32	330	.13	12	754	<.010
JAN										
15...	8.1	180	4.5	56	28	350	.13	9.6	702	.019
MAR										
26...	7.5	191	5.7	--	26	360	.19	9.3	726	.012
MAY										
14...	6.2	117	4.8	--	29	220	.13	11	494	.017
JUL										
09...	8.4	151	6.2	--	27	280	.12	13	674	.030
AUG										
13...	4.0	76	3.7	--	16	130	.18	8.2	323	.013
17...	--	--	--	--	--	--	--	--	--	--
SEP										
17...	4.0	67	5.5	--	19	110	.19	8.4	295	.057

CHARLES RIVER BASIN

01104433 HOBBS BROOK, UNNAMED TRIBUTARY 1 NEAR KENDAL GREEN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
23...	<0.050	<0.015	0.35	<0.20	0.057	<0.010	<0.010	200	1420	4.4
27...	.226	<.015	.33	<.20	.019	<.010	<.010	--	--	4.5
NOV										
06...	--	--	--	--	--	--	--	--	--	--
19...	.576	.151	.41	.31	.017	<.010	.013	240	245	3.1
22...	.353	<.020	.22	.21	<.010	.013	.020	150	55	--
DEC										
16...	.716	.169	.45	.39	.015	<.010	<.010	86	240	--
JAN										
15...	1.22	.223	.50	.38	<.010	<.010	.013	210	261	--
MAR										
26...	1.48	.164	.35	.28	.010	<.010	.002	210	267	--
MAY										
14...	1.69	.193	.40	.41	<.010	<.010	<.001	210	220	--
JUL										
09...	1.24	.228	.48	.34	.059	<.010	.001	57	323	--
AUG										
13...	<.050	.290	.56	.53	.036	.013	.009	190	205	--
17...	--	--	--	--	--	--	--	--	--	--
SEP										
17...	.512	.301	.65	.23	.057	<.010	.009	190	249	--





01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

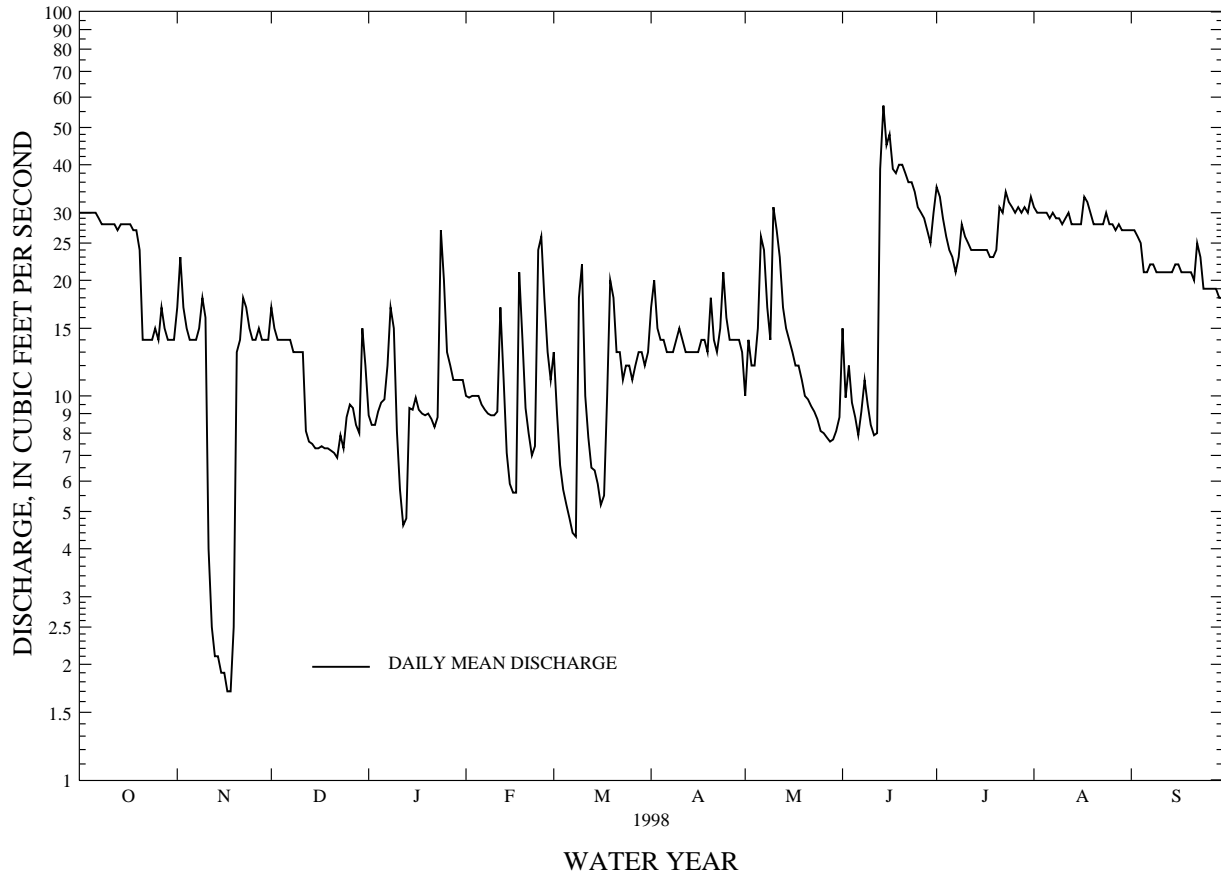
SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	6383.2	
ANNUAL MEAN	17.5	
HIGHEST DAILY MEAN	57	Jun 14
LOWEST DAILY MEAN	1.7	Nov 17
ANNUAL SEVEN-DAY MINIMUM	2.0	Nov 12
INSTANTANEOUS PEAK FLOW	94	Jun 13
INSTANTANEOUS PEAK STAGE	3.78	Jun 13
INSTANTANEOUS LOW FLOW	1.6	Nov 19
10 PERCENT EXCEEDS	30	
50 PERCENT EXCEEDS	14	
90 PERCENT EXCEEDS	7.4	

e Estimated

HOBBS BROOK AT KENDAL GREEN, MA 01104440



## CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to September 1998.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1997 to September 1998.

WATER TEMPERATURE: October 1997 to September 1998.

CALCIUM CONCENTRATION: October 1997 to September 1998.

CALCIUM LOAD: October 1997 to September 1998.

SODIUM CONCENTRATION: October 1997 to September 1998.

SODIUM LOAD: October 1997 to September 1998.

CHLORIDE CONCENTRATION: October 1997 to September 1998.

CHLORIDE LOAD: October 1997 to September 1998.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

REMARKS.--Records good, except those for estimated daily specific conductances, which are poor. Calcium, sodium, and chloride concentrations and loads records are good, except those for which have estimated daily discharge and/or specific conductance.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,170  $\mu\text{S}/\text{cm}$ , Dec. 24; minimum, 128  $\mu\text{S}/\text{cm}$ , June 14.

WATER TEMPERATURE: Maximum recorded, 24.1°C, Aug. 27, 28; minimum, 0.0°C, Nov. 14, Dec. 23, and Jan. 23.

CALCIUM CONCENTRATION: Maximum daily mean, 22 mg/L, Dec. 24 and Feb. 4-6; minimum daily mean, 6.4 mg/L, June 14.

CALCIUM LOAD: Maximum daily, 1.75 tons, June 20; minimum daily, 0.07 tons, Nov. 17-18.

SODIUM CONCENTRATION: Maximum daily mean, 82 mg/L, Feb. 5; minimum daily mean, 17 mg/L, June 14.

SODIUM LOAD: Maximum daily, 5.96 tons, June 20; minimum daily, 0.24 tons, Nov. 18.

CHLORIDE CONCENTRATION: Maximum daily mean, 150 mg/L, Dec. 24 and Feb. 5; minimum daily mean, 30 mg/L, June 14.

CHLORIDE LOAD: Maximum daily, 10.7 tons, June 20; minimum daily, 0.44 tons, Nov. 18.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 OF (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
21...	1300	14	511	7.6	--	12.6	757	10.1	96	19
23...	1430	13	500	7.4	--	10.3	774	--	--	19
NOV										
19...	1445	1.5	374	6.5	--	3.6	762	14.0	106	--
21...	1150	12	506	6.7	--	4.6	770	--	--	19
22...	1445	20	434	6.9	--	3.6	759	12.5	95	18
DEC										
16...	1330	6.2	503	6.8	9.2	3.6	754	--	--	20
17...	0915	7.3	505	6.3	--	2.1	756	13.2	97	--
JAN										
13...	1500	4.6	299	6.8	--	4.4	757	11.9	93	16
FEB										
11...	1515	9.0	547	--	5.0	5.3	760	--	--	21
MAR										
18...	0915	10	391	6.6	4.4	4.0	771	12.2	92	19
24...	1106	9.6	465	7.0	--	5.4	760	--	--	18
APR										
16...	0900	12	522	7.0	11.6	11.6	758	--	--	20
MAY										
13...	0930	16	297	6.6	9.6	11.2	767	10.1	91	--
19...	1045	11	432	7.2	22.4	17.7	752	--	--	18
JUN										
05...	1055	8.0	456	6.0	19.0	15.8	746	--	--	18
JUL										
08...	0930	19	450	6.4	22.3	20.5	759	8.0	90	18
29...	1115	33	455	7.2	31.3	21.4	751	--	--	18
AUG										
12...	0945	29	437	6.8	20.5	21.5	758	7.7	88	--
SEP										
17...	1030	21	440	6.8	17.1	19.8	762	8.5	93	17

CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
21...	3.6	70	2.2	22	13	130	<0.10	2.3	266	<0.010
23...	--	69	--	--	--	130	--	--	--	--
NOV										
19...	--	--	--	29	16	--	--	--	--	.013
21...	--	64	--	--	--	130	--	--	--	--
22...	3.3	58	2.8	--	16	110	<.10	3.1	246	<.010
DEC										
16...	--	64	--	--	--	120	--	--	--	--
17...	--	--	--	--	19	--	--	--	--	.012
JAN										
13...	3.1	38	2.2	16	16	70	<.10	8.3	182	.010
FEB										
11...	--	76	--	--	--	140	--	--	--	--
MAR										
18...	3.3	49	2.5	--	16	89	<.10	7.4	212	<.010
24...	--	67	--	--	--	110	--	--	--	--
APR										
16...	--	71	--	--	--	130	--	--	--	<.010
MAY										
13...	--	--	--	--	13	--	--	--	--	.011
19...	--	57	--	--	--	98	--	--	--	--
JUN										
05...	--	62	--	--	--	110	--	--	--	--
JUL										
08...	3.1	63	1.8	--	11	97	<.10	3.2	257	.014
29...	--	62	--	--	--	120	--	--	--	--
AUG										
12...	--	--	--	--	9.5	--	--	--	--	.028
SEP										
17...	2.9	61	2.0	--	12	110	<.10	3.2	239	.011

## CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
21...	<0.050	<0.015	0.27	<0.20	<0.010	<0.010	<0.010	25	66	3.7
23...	--	--	--	--	--	--	--	--	--	--
NOV										
19...	.300	.131	.55	.34	.047	<.010	.016	140	391	4.0
21...	--	--	--	--	--	--	--	--	--	--
22...	.080	<.020	.28	.21	.012	<.010	.016	56	119	--
DEC										
16...	--	--	--	--	--	--	--	--	--	--
17...	.154	<.020	.49	.22	.036	<.010	<.010	110	202	--
JAN										
13...	.976	.057	.29	.22	<.010	<.010	.013	130	213	--
FEB										
11...	--	--	--	--	--	--	--	--	--	--
MAR										
18...	.672	.066	.27	.18	.011	<.010	.002	93	132	3.4
24...	--	--	--	--	--	--	--	--	--	--
APR										
16...	.286	.041	.28	.19	.012	<.010	<.001	--	--	--
MAY										
13...	.457	.037	.39	.28	.018	<.010	.001	110	95	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	--	--	--	--	--	--	--	--	--	--
JUL										
08...	.144	.104	.41	.29	.015	<.010	.002	100	304	--
29...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	.193	.233	.27	.42	<.010	<.010	.001	650	421	--
SEP										
17...	.129	.039	--	--	.025	.011	.001	58	118	--

CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	e500	e500	e500	480	413	462	525	449	458	510	451	483
2	e500	e500	e500	447	391	421	457	443	452	517	509	512
3	e501	e500	e499	412	397	406	470	439	454	517	502	511
4	503	500	502	442	411	427	500	468	472	512	490	500
5	503	488	499	452	439	447	484	470	473	501	489	497
6	499	495	498	461	451	456	483	475	478	500	480	491
7	499	498	499	464	459	462	488	480	485	493	449	477
8	499	497	498	461	449	457	489	482	486	452	401	429
9	499	498	498	455	423	439	487	482	485	401	358	382
10	501	498	499	426	400	415	486	483	485	358	325	336
11	501	500	501	400	394	397	486	480	484	325	308	316
12	501	498	500	401	391	396	481	474	478	316	307	313
13	501	499	500	410	394	403	481	471	476	348	300	311
14	502	499	501	415	361	389	482	475	480	412	348	388
15	503	501	502	416	383	408	489	474	482	437	412	427
16	503	501	502	420	413	417	490	482	486	472	419	435
17	501	498	500	419	394	409	492	481	488	456	439	448
18	501	498	500	414	398	407	493	485	490	480	449	458
19	500	497	499	428	389	405	521	482	502	479	454	464
20	501	493	498	495	428	486	521	504	514	480	468	474
21	495	488	492	505	482	495	516	510	513	491	471	481
22	490	480	486	548	459	475	520	505	515	502	461	481
23	512	475	489	484	470	474	928	431	528	588	439	493
24	508	502	505	474	464	470	1170	512	576	561	449	502
25	505	473	496	477	469	475	690	503	539	550	490	515
26	494	488	491	502	470	476	532	503	516	513	478	499
27	491	456	472	475	464	470	549	530	538	508	450	480
28	464	453	459	476	474	474	554	533	547	486	480	483
29	470	458	464	480	471	474	651	519	544	489	475	480
30	477	470	473	480	460	474	541	465	502	497	488	491
31	480	475	478	---	---	---	501	468	487	503	494	498
MONTH	512	453	494	548	361	442	1170	431	497	588	300	453
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	519	495	506	352	330	343	576	439	487	467	458	463
2	527	507	516	362	330	349	458	438	454	464	419	440
3	566	510	538	330	314	320	457	445	452	439	398	430
4	573	557	566	330	315	322	446	443	445	433	413	426
5	613	572	582	321	310	316	449	444	447	427	368	409
6	577	560	569	328	309	317	453	447	450	374	299	330
7	570	557	564	347	319	328	468	449	457	299	247	275
8	567	557	563	339	288	320	471	448	460	303	286	295
9	570	553	561	340	253	302	466	435	456	317	302	309
10	566	543	559	279	214	250	460	436	449	318	249	280
11	577	534	551	224	212	217	464	445	453	256	221	237
12	788	462	518	286	224	233	463	444	452	255	239	246
13	499	455	476	254	210	231	466	445	455	285	252	268
14	455	436	447	248	239	242	470	452	461	321	284	306
15	459	419	439	251	237	244	474	460	466	351	321	339
16	464	434	449	252	235	243	478	465	471	370	351	362
17	461	443	454	304	245	258	475	438	466	382	369	376
18	452	298	396	409	304	365	465	455	460	390	379	385
19	370	328	340	367	307	331	462	454	458	427	390	411
20	338	320	331	336	311	321	457	391	423	438	426	431
21	338	326	333	412	317	344	425	399	412	441	428	433
22	342	327	335	403	329	369	468	413	438	441	432	437
23	413	337	355	473	403	422	473	392	451	448	438	443
24	419	352	385	504	421	447	425	392	416	454	445	449
25	352	318	329	514	431	465	406	386	395	455	446	449
26	344	321	335	588	479	517	431	401	414	458	451	454
27	348	330	341	526	453	482	450	424	438	465	454	459
28	355	340	347	503	477	489	458	441	451	471	461	465
29	---	---	---	499	485	493	472	452	463	478	466	471
30	---	---	---	492	474	482	471	462	468	485	469	475
31	---	---	---	500	472	485	---	---	---	482	395	469
MONTH	788	298	453	588	210	350	576	386	449	485	221	388

e Estimated

CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	447	373	427	390	347	382	450	434	441	432	426	429
2	429	419	425	406	381	389	452	437	444	435	426	430
3	424	382	416	426	406	416	452	441	446	435	427	431
4	429	418	424	435	426	430	455	435	447	434	428	431
5	456	428	443	437	431	434	453	443	447	437	429	435
6	461	452	457	442	434	438	453	444	448	437	434	436
7	468	457	463	442	438	440	448	432	442	436	424	433
8	459	441	449	449	441	444	441	437	438	437	430	433
9	446	439	441	453	446	449	437	433	435	435	428	432
10	453	441	447	453	448	451	433	430	432	433	427	429
11	458	451	454	452	449	451	432	362	427	434	427	429
12	458	454	456	453	449	451	e466	e419	e424	435	426	431
13	459	164	320	462	448	451	429	426	428	438	425	433
14	164	128	150	454	450	452	428	424	426	439	429	433
15	250	163	206	455	450	452	e467	e424	e426	448	397	435
16	344	249	294	453	450	451	e483	e425	e443	446	439	443
17	391	344	373	451	448	449	e485	e377	e429	445	441	443
18	408	391	401	451	446	448	407	355	401	443	440	442
19	414	407	411	450	445	447	416	399	409	444	440	442
20	416	411	413	446	441	444	425	412	419	444	441	443
21	421	414	417	447	443	444	427	423	425	445	442	444
22	421	417	419	445	441	443	428	425	426	445	322	418
23	429	418	423	443	382	431	428	426	427	395	361	376
24	439	428	433	431	419	424	428	403	421	409	378	395
25	441	434	437	437	427	431	424	420	423	423	408	417
26	443	437	440	440	433	436	436	419	429	432	423	428
27	442	438	440	437	433	435	436	430	434	436	429	432
28	443	437	440	437	433	435	435	427	431	435	432	434
29	442	437	440	459	426	443	432	428	429	446	432	444
30	441	385	417	454	449	451	431	427	429	445	441	444
31	---	---	---	449	427	438	433	428	430	---	---	---
MONTH	468	128	406	462	347	438	485	355	431	448	322	431
YEAR	1170	128	436									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	10.6	8.9	9.7	3.4	1.9	3.0	1.7	0.4	1.1
2	---	---	---	12.2	10.4	11.2	2.4	1.3	1.7	3.3	1.6	2.4
3	---	---	---	12.1	10.7	11.2	2.6	1.1	1.8	4.4	2.3	3.3
4	15.4	14.2	14.8	11.8	10.3	10.9	3.4	1.9	2.6	4.8	3.2	3.9
5	15.8	15.0	15.4	11.1	9.5	10.2	3.3	2.6	3.0	4.7	3.5	3.9
6	16.5	14.8	15.6	10.4	8.7	9.5	3.5	2.2	2.7	5.4	4.0	4.5
7	16.7	15.2	15.9	9.8	9.0	9.4	3.5	2.3	2.8	4.3	3.6	4.0
8	15.9	14.3	15.3	9.4	9.1	9.2	3.6	2.2	2.7	3.8	3.5	3.7
9	16.6	15.3	15.9	9.1	8.9	9.0	3.3	1.9	2.4	3.8	3.2	3.6
10	17.5	16.2	16.8	9.7	8.8	9.2	3.2	2.2	2.6	4.4	2.5	3.3
11	16.8	15.3	16.0	9.8	6.4	8.5	3.0	2.0	2.4	4.5	2.2	3.1
12	15.7	14.2	15.1	7.5	4.8	6.0	3.7	1.9	2.8	3.0	1.3	2.0
13	16.0	14.2	15.2	6.0	3.4	4.6	3.7	2.0	2.8	4.7	1.6	3.3
14	16.1	14.9	15.6	4.1	.0	1.8	3.7	1.6	2.5	3.3	1.8	2.3
15	16.1	15.6	15.9	3.9	.6	2.7	3.2	1.2	2.1	2.7	1.7	2.2
16	15.9	14.9	15.4	3.9	2.1	3.0	3.5	1.6	2.4	2.8	1.3	2.0
17	14.9	13.7	14.4	4.3	.8	2.5	4.1	2.0	2.8	2.8	1.5	2.0
18	14.0	12.9	13.5	5.0	1.6	3.1	3.8	1.9	2.6	2.4	1.6	1.9
19	13.3	12.5	12.9	4.0	.9	2.5	4.2	2.1	3.1	3.0	1.5	2.1
20	13.4	12.4	12.8	4.5	2.7	3.5	4.1	2.4	3.2	2.9	1.6	2.2
21	13.1	11.7	12.3	5.0	3.1	3.9	3.2	1.7	2.3	3.0	1.2	1.7
22	12.2	10.1	11.2	4.2	3.6	3.9	3.0	1.2	2.2	2.3	.5	1.1
23	10.7	9.0	9.7	3.6	3.0	3.2	2.9	.0	1.8	1.4	.0	.8
24	10.3	8.5	9.5	4.1	2.5	3.2	3.2	2.3	2.7	1.4	1.1	1.2
25	9.9	9.2	9.8	3.1	1.6	2.4	3.2	2.4	2.8	2.2	.9	1.3
26	9.8	8.3	9.1	4.1	2.6	3.3	4.0	2.5	3.1	2.6	.8	1.4
27	9.8	9.1	9.5	4.2	2.2	3.4	3.3	2.5	2.8	2.5	.3	1.2
28	9.6	8.2	9.1	2.8	2.0	2.4	3.0	1.1	2.3	2.6	1.7	2.0
29	8.8	7.6	8.2	3.4	2.2	2.6	3.2	.8	2.0	3.7	1.9	2.5
30	9.5	7.4	8.2	3.5	2.0	2.8	3.0	2.1	2.6	3.3	2.2	2.7
31	9.4	7.4	8.4	---	---	---	2.7	.8	1.9	3.5	2.1	2.8
MONTH	---	---	---	12.2	.0	5.6	4.2	.0	2.5	5.4	.0	2.4

e Estimated

CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4.1	1.6	2.5	6.0	5.5	5.8	13.6	9.9	11.8	16.6	13.6	15.2
2	4.3	1.6	2.7	8.3	5.3	6.5	9.9	9.1	9.5	15.9	14.4	15.0
3	4.8	2.5	3.4	6.8	5.5	6.0	11.5	8.7	9.9	17.1	14.3	15.1
4	4.1	2.8	3.3	8.3	4.3	6.2	9.5	8.2	9.0	17.4	13.7	15.0
5	2.9	2.1	2.5	6.4	4.8	5.8	8.5	7.4	7.9	16.9	14.3	15.3
6	4.0	1.4	2.3	7.7	3.8	5.5	9.2	7.0	8.1	15.7	14.1	14.6
7	4.0	1.3	2.3	6.7	4.9	5.8	12.7	6.8	9.4	14.6	13.8	14.2
8	3.6	1.8	2.4	7.8	3.9	5.8	12.9	8.2	10.3	15.6	13.5	14.3
9	4.2	1.2	2.4	8.5	5.2	6.4	12.0	9.6	10.5	14.2	12.9	13.5
10	4.8	1.6	2.8	9.5	6.2	8.2	12.6	8.6	10.3	12.9	11.6	12.1
11	5.5	2.7	3.8	7.3	3.2	5.2	13.7	8.4	10.7	11.6	10.8	11.1
12	5.0	3.8	4.4	4.6	1.0	2.7	14.3	8.7	11.1	14.7	10.4	12.2
13	5.5	2.6	3.9	5.3	.1	2.3	14.7	8.9	11.4	15.3	11.1	12.8
14	4.3	.9	2.4	4.1	2.1	3.1	15.2	9.6	12.1	16.4	11.4	13.6
15	3.6	.3	1.5	5.3	2.3	3.7	14.3	10.6	12.1	18.4	11.7	14.9
16	4.3	.6	2.2	6.1	2.0	3.8	14.7	11.3	12.7	19.3	14.0	16.3
17	4.4	2.1	3.0	7.9	1.5	4.3	13.5	12.4	12.9	16.5	14.1	15.2
18	2.8	2.3	2.7	5.8	3.5	4.5	14.8	11.3	12.9	19.4	13.8	16.5
19	3.3	2.5	2.8	4.7	4.2	4.5	13.2	12.0	12.5	19.8	15.1	17.3
20	5.9	2.3	3.9	4.5	3.9	4.2	12.5	10.8	11.7	18.5	15.0	16.9
21	5.8	3.5	4.3	3.9	2.1	3.0	15.0	9.8	12.2	19.3	16.0	17.6
22	7.0	2.8	4.4	2.3	.4	1.6	16.5	10.7	13.3	18.9	15.0	16.8
23	4.9	2.7	3.8	5.5	1.6	3.3	13.3	11.0	12.4	18.9	14.4	16.6
24	4.1	3.1	3.7	7.7	2.5	4.6	12.2	10.4	11.1	19.8	15.0	17.3
25	4.7	3.6	3.9	8.5	3.3	5.4	12.8	10.4	11.4	18.1	15.4	16.7
26	6.3	3.4	4.4	9.3	4.5	6.6	12.1	9.6	10.8	19.8	15.2	17.5
27	7.0	3.4	4.8	11.4	6.7	9.0	14.8	10.1	12.0	20.0	15.4	17.7
28	7.7	4.0	5.7	13.4	9.1	10.7	13.8	10.3	11.9	21.5	16.2	18.7
29	---	---	---	13.6	10.2	11.7	15.9	10.4	12.9	21.6	17.8	19.6
30	---	---	---	14.3	9.6	11.9	17.6	12.9	14.8	22.6	18.6	20.3
31	---	---	---	16.4	11.7	13.7	---	---	---	20.4	18.0	19.0
MONTH	7.7	.3	3.3	16.4	.1	5.9	17.6	6.8	11.3	22.6	10.4	15.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.2	17.8	19.2	20.7	19.1	19.8	22.3	19.5	20.8	23.2	21.0	22.2
2	19.5	16.2	17.9	21.8	18.9	20.3	22.3	19.8	21.1	23.1	21.5	22.3
3	19.3	16.6	17.7	22.5	20.0	21.4	22.8	20.3	21.5	23.3	21.4	22.4
4	17.6	15.0	16.2	22.5	20.8	21.8	22.6	20.7	21.5	23.4	21.5	22.4
5	18.4	14.5	16.3	22.7	20.8	21.7	22.7	20.5	21.5	22.7	21.0	21.9
6	18.3	15.2	16.9	22.7	20.3	21.4	23.5	21.0	21.8	22.8	20.6	21.8
7	18.0	16.0	16.6	21.9	20.5	21.3	22.2	21.1	21.7	22.7	22.0	22.3
8	16.5	15.4	15.9	21.5	20.1	20.8	23.0	21.0	22.0	22.6	21.4	21.9
9	19.5	15.0	17.0	21.3	19.3	20.3	23.0	21.0	22.1	21.4	20.1	20.8
10	21.0	16.5	18.6	21.7	19.7	20.5	23.1	21.5	22.4	21.1	19.3	20.2
11	20.7	17.2	18.8	20.4	18.8	19.7	22.9	22.0	22.3	21.2	18.9	20.1
12	18.6	17.4	18.0	20.9	18.3	19.6	22.2	21.1	21.6	21.4	19.4	20.5
13	17.8	17.1	17.3	21.2	18.6	20.0	22.7	20.7	21.6	21.6	20.5	20.9
14	17.3	16.5	17.0	21.7	19.5	20.6	22.7	20.8	21.8	20.6	20.0	20.4
15	18.0	16.4	17.3	21.9	19.9	21.0	22.9	21.3	22.1	21.7	20.3	20.9
16	17.9	17.2	17.5	21.9	20.4	21.2	23.6	21.8	22.7	22.6	20.9	21.6
17	18.7	17.5	18.1	21.7	20.4	21.0	22.8	22.0	22.1	21.3	19.5	20.5
18	20.2	18.2	19.2	22.6	20.0	21.1	23.7	21.9	22.6	20.9	19.4	20.2
19	20.6	18.8	19.8	22.0	19.4	20.6	22.7	21.0	21.9	21.0	19.0	20.2
20	21.3	19.7	20.4	20.8	19.9	20.3	22.6	20.2	21.6	21.8	19.9	20.9
21	21.8	20.2	20.9	21.6	19.6	20.6	22.9	21.1	22.0	21.7	20.8	21.2
22	21.3	20.2	20.8	21.9	20.3	21.0	23.6	21.0	22.3	21.4	20.2	21.0
23	20.7	19.4	19.7	21.9	20.4	21.0	22.7	21.6	22.3	20.2	18.0	19.2
24	21.3	19.2	20.3	21.5	20.1	20.8	23.6	22.0	22.9	18.6	16.8	17.8
25	22.1	20.3	21.2	21.4	19.3	20.3	23.8	22.6	23.2	18.7	17.0	18.0
26	22.7	21.3	22.0	21.8	19.5	20.6	23.3	22.4	22.9	20.1	18.3	19.2
27	22.2	20.8	21.7	21.3	19.3	20.4	24.1	22.4	23.2	20.9	19.4	20.1
28	21.8	19.7	20.7	21.8	20.0	20.9	24.1	22.2	23.2	20.7	19.1	20.0
29	20.8	19.9	20.2	22.0	20.7	21.3	23.2	22.3	22.7	19.2	17.7	18.5
30	20.0	19.2	19.6	21.9	20.2	21.1	23.6	22.2	22.9	18.8	17.5	18.3
31	---	---	---	21.3	20.3	20.7	22.9	22.0	22.4	---	---	---
MONTH	22.7	14.5	18.8	22.7	18.3	20.7	24.1	19.5	22.2	23.4	16.8	20.6



## CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e30	19	1.56	17	18	0.83	17	18	0.81
2	e30	19	1.56	23	16	1.01	15	18	.72
3	e30	19	1.56	17	16	.74	14	18	.68
4	30	19	1.56	15	17	.68	14	18	.70
5	30	19	1.57	14	17	.67	14	18	.70
6	30	19	1.53	14	18	.66	14	19	.69
7	29	19	1.52	14	18	.67	14	19	.68
8	28	19	1.47	15	18	.72	13	19	.68
9	28	19	1.45	18	17	.85	13	19	.67
10	28	19	1.45	16	16	.70	13	19	.67
11	28	19	1.45	4.0	16	.17	13	19	.64
12	28	19	1.43	2.5	16	.10	8.1	18	.41
13	27	19	1.42	2.1	16	.09	7.6	18	.38
14	28	19	1.43	2.1	15	.09	7.5	19	.38
15	28	19	1.45	1.9	16	.08	7.3	19	.37
16	28	19	1.45	1.9	16	.08	7.3	19	.37
17	28	19	1.43	1.7	16	.07	7.4	19	.37
18	27	19	1.40	1.7	16	.07	7.3	19	.37
19	27	19	1.39	2.5	16	.11	7.3	19	.38
20	24	19	1.23	13	19	.68	7.2	20	.38
21	14	19	.72	14	19	.71	7.1	20	.38
22	14	19	.70	18	18	.89	6.9	20	.37
23	14	19	.71	17	18	.83	7.9	20	.43
24	14	19	.73	15	18	.75	7.3	22	.43
25	15	19	.79	14	18	.72	8.8	21	.49
26	14	19	.73	14	18	.71	9.5	20	.51
27	17	18	.84	15	18	.72	9.3	21	.52
28	15	18	.72	14	18	.69	8.4	21	.47
29	14	18	.69	14	18	.68	8.0	21	.45
30	14	18	.69	14	18	.68	15	19	.79
31	14	18	.69	---	---	---	12	19	.59
TOTAL	725	---	37.32	345.4	---	16.45	321.2	---	16.48

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	8.9	19	.45	10	19	0.54	13	14	0.46
2	8.4	20	.45	9.9	20	.53	9.0	14	.34
3	8.4	20	.45	10	21	.56	6.6	13	.23
4	9.1	19	.48	10	22	.59	5.7	13	.20
5	9.6	19	.50	10	22	.60	5.2	13	.18
6	9.8	19	.50	9.5	22	.56	4.8	13	.16
7	12	18	.58	9.2	21	.54	4.4	13	.16
8	17	17	.78	9.0	21	.52	4.3	13	.15
9	15	15	.62	8.9	21	.51	18	12	.58
10	8.1	13	.29	8.9	21	.51	22	10	.62
11	5.7	13	.19	9.1	21	.52	10	8.9	.25
12	4.6	13	.16	17	20	.91	7.8	9.6	.20
13	4.8	12	.16	11	18	.57	6.5	9.5	.17
14	9.3	15	.38	7.1	17	.33	6.4	9.9	.17
15	9.2	17	.41	5.9	17	.27	5.9	10	.16
16	9.9	17	.45	5.6	17	.26	5.2	9.9	.14
17	9.2	17	.43	5.6	18	.26	5.5	11	.16
18	9.0	18	.43	21	16	.89	10	14	.39
19	8.9	18	.43	14	14	.51	20	13	.71
20	9.0	18	.45	9.3	13	.33	18	13	.62
21	8.7	19	.44	8.0	13	.29	13	14	.50
22	8.3	19	.42	7.0	13	.25	13	15	.51
23	8.8	19	.46	7.4	14	.29	11	16	.51
24	27	19	1.40	24	15	.98	12	17	.56
25	20	20	1.04	26	13	.92	12	18	.58
26	13	19	.68	18	13	.64	11	20	.61
27	12	19	.58	13	14	.49	12	19	.59
28	11	19	.56	11	14	.42	13	19	.64
29	11	19	.55	---	---	---	13	19	.66
30	11	19	.56	---	---	---	12	19	.62
31	11	19	.56	---	---	---	13	19	.68
TOTAL	327.7	---	15.84	315.4	---	14.59	323.3	---	12.51

e Estimated

CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	17	19	0.84	10	18	0.49	15	17	0.67
2	20	18	.93	14	17	.64	9.9	17	.44
3	15	18	.73	12	17	.53	12	16	.52
4	14	17	.66	12	17	.53	9.6	17	.43
5	14	17	.64	15	16	.64	8.8	17	.41
6	13	17	.63	26	13	.93	7.9	18	.38
7	13	18	.63	24	11	.70	9.1	18	.44
8	13	18	.63	17	12	.56	11	17	.52
9	14	18	.67	14	12	.47	9.5	17	.44
10	15	17	.72	31	11	.94	8.4	17	.39
11	14	18	.64	27	9.7	.71	7.9	18	.38
12	13	18	.62	23	10	.61	8.0	18	.38
13	13	18	.62	17	11	.50	39	13	1.05
14	13	18	.62	15	12	.50	57	6.4	.98
15	13	18	.62	14	13	.50	45	8.5	1.05
16	13	18	.62	13	14	.50	48	12	1.51
17	14	18	.67	12	15	.49	39	15	1.57
18	14	18	.66	12	15	.47	38	16	1.62
19	13	18	.61	11	16	.47	40	16	1.72
20	18	17	.82	10	17	.47	40	16	1.75
21	14	16	.62	9.8	17	.45	38	16	1.67
22	13	17	.60	9.4	17	.43	36	16	1.60
23	15	18	.70	9.1	17	.42	36	17	1.60
24	21	16	.92	8.7	17	.41	34	17	1.54
25	16	16	.65	8.1	17	.38	31	17	1.45
26	14	16	.63	8.0	18	.38	30	17	1.40
27	14	17	.65	7.8	18	.38	29	17	1.33
28	14	18	.67	7.6	18	.37	27	17	1.24
29	14	18	.68	7.7	18	.38	25	17	1.15
30	13	18	.62	8.1	18	.40	30	16	1.33
31	---	---	---	8.8	18	.43	---	---	---
TOTAL	434	---	20.32	422.1	---	16.08	779.1	---	30.96
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	35	15	1.43	31	17	1.42	27	17	1.20
2	33	15	1.36	30	17	1.40	27	17	1.20
3	29	16	1.26	30	17	1.40	26	17	1.18
4	26	17	1.19	30	17	1.39	25	17	1.15
5	24	17	1.12	30	17	1.39	21	17	.98
6	23	17	1.04	29	17	1.36	21	17	.97
7	21	17	.96	30	17	1.40	22	17	.99
8	23	17	1.08	29	17	1.33	22	17	.99
9	28	17	1.31	29	17	1.30	21	17	.97
10	26	18	1.25	28	17	1.29	21	17	.94
11	25	18	1.18	29	17	1.29	21	17	.94
12	24	18	1.15	30	17	1.32	21	17	.95
13	24	18	1.14	28	17	1.27	21	17	.95
14	24	18	1.13	28	17	1.26	21	17	.95
15	24	18	1.12	28	17	1.25	22	17	.99
16	24	18	1.12	28	17	1.29	22	17	1.00
17	24	17	1.11	33	17	1.50	21	17	.97
18	23	17	1.09	32	16	1.34	21	17	.96
19	23	17	1.06	30	16	1.28	21	17	.97
20	24	17	1.11	28	16	1.25	21	17	.98
21	31	17	1.43	28	17	1.25	20	17	.95
22	30	17	1.41	28	17	1.24	25	16	1.08
23	34	17	1.53	28	17	1.24	23	15	.93
24	32	17	1.44	30	16	1.31	19	16	.81
25	31	17	1.39	28	17	1.26	19	16	.83
26	30	17	1.39	28	17	1.28	19	17	.84
27	31	17	1.40	27	17	1.24	19	17	.87
28	30	17	1.39	28	17	1.25	19	17	.85
29	31	17	1.43	27	17	1.24	18	17	.86
30	30	18	1.44	27	17	1.22	18	17	.86
31	33	17	1.51	27	17	1.22	---	---	---
TOTAL	850	---	38.97	896	---	40.48	644	---	29.11
YEAR	6383.2		289.11						

## CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e30	69	5.55	17	63	2.88	17	62	2.80
2	e30	69	5.55	23	56	3.46	15	61	2.50
3	e30	68	5.53	17	54	2.51	14	61	2.35
4	30	69	5.57	15	57	2.34	14	64	2.47
5	30	68	5.60	14	60	2.34	14	64	2.45
6	30	68	5.44	14	62	2.31	14	65	2.43
7	29	68	5.39	14	63	2.33	14	66	2.42
8	28	68	5.23	15	62	2.51	13	66	2.39
9	28	68	5.17	18	59	2.92	13	66	2.38
10	28	68	5.14	16	55	2.37	13	66	2.38
11	28	69	5.14	4.0	52	.56	13	66	2.27
12	28	69	5.10	2.5	52	.35	8.1	65	1.43
13	27	69	5.05	2.1	53	.30	7.6	65	1.33
14	28	69	5.11	2.1	51	.29	7.5	65	1.32
15	28	69	5.18	1.9	54	.28	7.3	66	1.30
16	28	69	5.18	1.9	56	.28	7.3	66	1.31
17	28	69	5.09	1.7	54	.25	7.4	67	1.32
18	27	68	4.98	1.7	54	.24	7.3	67	1.33
19	27	68	4.94	2.5	54	.38	7.3	69	1.35
20	24	68	4.39	13	66	2.39	7.2	71	1.37
21	14	67	2.56	14	68	2.54	7.1	71	1.35
22	14	66	2.48	18	65	3.12	6.9	71	1.33
23	14	67	2.52	17	64	2.90	7.9	73	1.55
24	14	69	2.62	15	64	2.62	7.3	81	1.58
25	15	68	2.82	14	65	2.52	8.8	75	1.77
26	14	67	2.58	14	65	2.50	9.5	71	1.83
27	17	64	2.95	15	64	2.52	9.3	75	1.87
28	15	62	2.50	14	65	2.44	8.4	76	1.72
29	14	63	2.41	14	64	2.38	8.0	76	1.63
30	14	64	2.43	14	64	2.40	15	69	2.81
31	14	65	2.43	---	---	---	12	66	2.07
TOTAL	725	---	132.63	345.4	---	57.23	321.2	---	58.41

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	8.9	66	1.58	10	69	1.91	13	44	1.51
2	8.4	70	1.60	9.9	71	1.90	9.0	45	1.10
3	8.4	70	1.60	10	75	2.01	6.6	41	.73
4	9.1	69	1.69	10	79	2.15	5.7	41	.64
5	9.6	68	1.76	10	82	2.20	5.2	40	.57
6	9.8	67	1.78	9.5	79	2.05	4.8	41	.52
7	12	65	2.02	9.2	79	1.96	4.4	42	.50
8	17	57	2.69	9.0	79	1.92	4.3	41	.47
9	15	50	2.09	8.9	78	1.87	18	38	1.84
10	8.1	43	.94	8.9	78	1.86	22	31	1.89
11	5.7	40	.62	9.1	77	1.89	10	26	.73
12	4.6	40	.50	17	71	3.27	7.8	28	.59
13	4.8	40	.52	11	65	2.01	6.5	28	.49
14	9.3	51	1.28	7.1	60	1.15	6.4	30	.51
15	9.2	57	1.41	5.9	59	.94	5.9	30	.47
16	9.9	58	1.55	5.6	61	.92	5.2	30	.42
17	9.2	60	1.50	5.6	61	.92	5.5	32	.49
18	9.0	62	1.51	21	52	2.99	10	48	1.29
19	8.9	63	1.51	14	44	1.67	20	43	2.29
20	9.0	64	1.57	9.3	42	1.06	18	41	1.98
21	8.7	66	1.55	8.0	43	.93	13	45	1.62
22	8.3	66	1.47	7.0	43	.81	13	48	1.70
23	8.8	68	1.62	7.4	46	.94	11	56	1.74
24	27	69	4.98	24	51	3.27	12	60	1.95
25	20	71	3.73	26	42	2.97	12	63	2.02
26	13	68	2.43	18	43	2.07	11	71	2.20
27	12	65	2.04	13	44	1.59	12	66	2.08
28	11	66	1.98	11	45	1.38	13	67	2.27
29	11	65	1.94	---	---	---	13	68	2.33
30	11	67	1.97	---	---	---	12	66	2.20
31	11	68	1.97	---	---	---	13	66	2.42
TOTAL	327.7	---	55.40	315.4	---	50.61	323.3	---	41.56

e Estimated

CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	17	66	2.98	10	63	1.70	15	57	2.30
2	20	61	3.25	14	59	2.20	9.9	57	1.51
3	15	61	2.53	12	58	1.81	12	55	1.78
4	14	60	2.28	12	57	1.82	9.6	57	1.46
5	14	60	2.22	15	54	2.17	8.8	60	1.41
6	13	61	2.19	26	42	2.98	7.9	62	1.32
7	13	62	2.19	24	34	2.17	9.1	63	1.55
8	13	62	2.19	17	37	1.74	11	61	1.79
9	14	62	2.34	14	39	1.49	9.5	59	1.52
10	15	61	2.51	31	35	2.90	8.4	60	1.37
11	14	61	2.23	27	29	2.11	7.9	61	1.32
12	13	61	2.17	23	30	1.83	8.0	62	1.32
13	13	62	2.16	17	33	1.52	39	41	3.21
14	13	62	2.17	15	39	1.59	57	17	2.62
15	13	63	2.18	14	44	1.64	45	25	3.03
16	13	64	2.16	13	47	1.64	48	37	4.73
17	14	63	2.35	12	49	1.63	39	49	5.20
18	14	62	2.30	12	51	1.58	38	53	5.48
19	13	62	2.13	11	55	1.61	40	55	5.83
20	18	57	2.80	10	58	1.61	40	55	5.96
21	14	55	2.12	9.8	58	1.54	38	56	5.68
22	13	59	2.08	9.4	59	1.48	36	56	5.46
23	15	61	2.43	9.1	60	1.46	36	57	5.46
24	21	55	3.14	8.7	60	1.42	34	58	5.28
25	16	52	2.19	8.1	61	1.32	31	59	4.98
26	14	55	2.13	8.0	61	1.33	30	59	4.83
27	14	59	2.26	7.8	62	1.31	29	59	4.59
28	14	61	2.31	7.6	63	1.30	27	59	4.27
29	14	63	2.39	7.7	64	1.34	25	59	3.95
30	13	63	2.17	8.1	65	1.40	30	56	4.53
31	---	---	---	8.8	64	1.50	---	---	---
TOTAL	434	---	70.55	422.1	---	53.14	779.1	---	103.74

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	35	50	4.76	31	59	4.89	27	57	4.13
2	33	51	4.56	30	60	4.84	27	58	4.12
3	29	55	4.29	30	60	4.84	26	58	4.05
4	26	58	4.08	30	60	4.83	25	58	3.95
5	24	58	3.84	30	60	4.80	21	58	3.37
6	23	59	3.59	29	60	4.72	21	58	3.36
7	21	59	3.33	30	59	4.85	22	58	3.41
8	23	60	3.75	29	59	4.58	22	58	3.40
9	28	61	4.55	29	58	4.48	21	58	3.32
10	26	61	4.33	28	58	4.42	21	57	3.22
11	25	61	4.11	29	57	4.43	21	57	3.22
12	24	61	3.99	30	57	4.52	21	58	3.28
13	24	61	3.95	28	57	4.37	21	58	3.28
14	24	61	3.93	28	57	4.32	21	58	3.28
15	24	61	3.89	28	57	4.28	22	58	3.40
16	24	61	3.90	28	60	4.46	22	60	3.47
17	24	61	3.86	33	58	5.13	21	60	3.36
18	23	60	3.80	32	53	4.53	21	59	3.33
19	23	60	3.67	30	54	4.34	21	59	3.34
20	24	60	3.83	28	56	4.26	21	60	3.39
21	31	60	4.94	28	57	4.27	20	60	3.28
22	30	60	4.89	28	57	4.25	25	56	3.68
23	34	58	5.25	28	57	4.27	23	49	3.09
24	32	57	4.94	30	56	4.47	19	52	2.74
25	31	58	4.78	28	56	4.30	19	56	2.83
26	30	59	4.78	28	58	4.39	19	57	2.88
27	31	58	4.82	27	58	4.28	19	58	2.98
28	30	58	4.79	28	58	4.30	19	58	2.92
29	31	60	4.93	27	57	4.24	18	60	2.98
30	30	61	4.99	27	57	4.19	18	60	2.97
31	33	59	5.22	27	58	4.18	---	---	---
TOTAL	850	---	134.34	896	---	139.03	644	---	100.03
YEAR	6383.2	---	996.67	---	---	---	---	---	---

## CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e30	120	10.1	17	110	5.20	17	110	5.07
2	e30	120	10.1	23	100	6.24	15	110	4.52
3	e30	120	10.0	17	97	4.52	14	110	4.24
4	30	120	10.1	15	100	4.22	14	120	4.46
5	30	120	10.1	14	110	4.22	14	120	4.44
6	30	120	9.85	14	110	4.17	14	120	4.41
7	29	120	9.78	14	110	4.21	14	120	4.38
8	28	120	9.48	15	110	4.53	13	120	4.32
9	28	120	9.37	18	110	5.27	13	120	4.30
10	28	120	9.31	16	99	4.27	13	120	4.30
11	28	120	9.32	4.0	94	1.01	13	120	4.11
12	28	120	9.24	2.5	94	.63	8.1	120	2.58
13	27	120	9.16	2.1	96	.55	7.6	120	2.40
14	28	120	9.26	2.1	92	.52	7.5	120	2.39
15	28	120	9.38	1.9	98	.51	7.3	120	2.35
16	28	120	9.38	1.9	100	.50	7.3	120	2.38
17	28	120	9.23	1.7	98	.46	7.4	120	2.40
18	27	120	9.02	1.7	97	.44	7.3	120	2.40
19	27	120	8.96	2.5	97	.68	7.3	120	2.44
20	24	120	7.95	13	120	4.33	7.2	130	2.49
21	14	120	4.63	14	120	4.60	7.1	130	2.45
22	14	120	4.50	18	120	5.64	6.9	130	2.40
23	14	120	4.57	17	120	5.26	7.9	130	2.82
24	14	130	4.74	15	120	4.74	7.3	150	2.88
25	15	120	5.11	14	120	4.56	8.8	140	3.21
26	14	120	4.68	14	120	4.53	9.5	130	3.32
27	17	120	5.35	15	120	4.55	9.3	140	3.40
28	15	110	4.51	14	120	4.42	8.4	140	3.12
29	14	110	4.36	14	120	4.30	8.0	140	2.97
30	14	120	4.39	14	120	4.34	15	120	5.10
31	14	120	4.40	---	---	---	12	120	3.75
TOTAL	725	---	240.33	345.4	---	103.42	321.2	---	105.80

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	8.9	120	2.87	10	130	3.46	13	79	2.70
2	8.4	130	2.89	9.9	130	3.45	9.0	81	1.97
3	8.4	130	2.90	10	140	3.66	6.6	73	1.30
4	9.1	120	3.07	10	140	3.91	5.7	73	1.13
5	9.6	120	3.20	10	150	4.00	5.2	72	1.02
6	9.8	120	3.22	9.5	140	3.72	4.8	72	.93
7	12	120	3.66	9.2	140	3.57	4.4	75	.89
8	17	100	4.84	9.0	140	3.49	4.3	73	.84
9	15	90	3.74	8.9	140	3.41	18	68	3.28
10	8.1	77	1.69	8.9	140	3.38	22	55	3.35
11	5.7	72	1.11	9.1	140	3.43	10	46	1.29
12	4.6	71	.88	17	130	5.94	7.8	50	1.04
13	4.8	71	.92	11	120	3.64	6.5	49	.87
14	9.3	92	2.30	7.1	110	2.07	6.4	52	.90
15	9.2	100	2.54	5.9	110	1.69	5.9	53	.83
16	9.9	110	2.80	5.6	110	1.65	5.2	53	.74
17	9.2	110	2.70	5.6	110	1.66	5.5	57	.86
18	9.0	110	2.73	21	94	5.38	10	85	2.31
19	8.9	110	2.73	14	78	2.99	20	76	4.09
20	9.0	120	2.83	9.3	76	1.90	18	73	3.53
21	8.7	120	2.80	8.0	77	1.65	13	80	2.89
22	8.3	120	2.67	7.0	77	1.45	13	87	3.06
23	8.8	120	2.93	7.4	83	1.69	11	100	3.14
24	27	120	9.03	24	91	5.87	12	110	3.53
25	20	130	6.76	26	75	5.31	12	110	3.66
26	13	120	4.40	18	77	3.69	11	130	4.00
27	12	120	3.68	13	79	2.84	12	120	3.77
28	11	120	3.58	11	80	2.47	13	120	4.11
29	11	120	3.50	---	---	---	13	120	4.23
30	11	120	3.57	---	---	---	12	120	3.98
31	11	120	3.57	---	---	---	13	120	4.38
TOTAL	327.7	---	100.11	315.4	---	91.37	323.3	---	74.62

e Estimated

CHARLES RIVER BASIN

01104440 HOBBS BROOK AT KENDAL GREEN, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	17	120	5.39	10	110	3.07	15	100	4.15
2	20	110	5.87	14	110	3.97	9.9	100	2.72
3	15	110	4.56	12	100	3.26	12	100	3.21
4	14	110	4.11	12	100	3.29	9.6	100	2.63
5	14	110	4.01	15	98	3.90	8.8	110	2.54
6	13	110	3.95	26	76	5.32	7.9	110	2.38
7	13	110	3.96	24	61	3.86	9.1	110	2.81
8	13	110	3.96	17	66	3.10	11	110	3.23
9	14	110	4.23	14	70	2.65	9.5	110	2.75
10	15	110	4.52	31	62	5.15	8.4	110	2.47
11	14	110	4.02	27	51	3.72	7.9	110	2.38
12	13	110	3.91	23	53	3.23	8.0	110	2.39
13	13	110	3.91	17	59	2.70	39	73	5.69
14	13	110	3.93	15	69	2.84	57	30	4.54
15	13	110	3.94	14	78	2.93	45	43	5.32
16	13	120	3.91	13	85	2.94	48	66	8.41
17	14	110	4.25	12	89	2.92	39	88	9.33
18	14	110	4.16	12	91	2.84	38	96	9.85
19	13	110	3.86	11	99	2.90	40	98	10.5
20	18	100	5.05	10	100	2.89	40	99	10.7
21	14	99	3.81	9.8	100	2.77	38	100	10.2
22	13	110	3.75	9.4	110	2.68	36	100	9.84
23	15	110	4.38	9.1	110	2.63	36	100	9.83
24	21	100	5.66	8.7	110	2.57	34	100	9.53
25	16	94	3.93	8.1	110	2.38	31	110	8.98
26	14	99	3.84	8.0	110	2.39	30	110	8.71
27	14	110	4.07	7.8	110	2.37	29	110	8.29
28	14	110	4.18	7.6	110	2.35	27	110	7.70
29	14	110	4.32	7.7	120	2.42	25	110	7.13
30	13	110	3.93	8.1	120	2.54	30	100	8.15
31	---	---	---	8.8	110	2.72	---	---	---
TOTAL	434	---	127.37	422.1	---	95.30	779.1	---	186.36
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	35	90	8.55	31	110	8.83	27	100	7.45
2	33	92	8.18	30	110	8.74	27	100	7.43
3	29	100	7.73	30	110	8.73	26	100	7.30
4	26	100	7.36	30	110	8.73	25	100	7.12
5	24	100	6.93	30	110	8.68	21	110	6.07
6	23	110	6.47	29	110	8.52	21	110	6.05
7	21	110	6.01	30	110	8.75	22	100	6.15
8	23	110	6.76	29	110	8.26	22	100	6.13
9	28	110	8.21	29	110	8.08	21	100	5.99
10	26	110	7.82	28	100	7.98	21	100	5.81
11	25	110	7.43	29	100	7.98	21	100	5.80
12	24	110	7.20	30	100	8.14	21	100	5.91
13	24	110	7.13	28	100	7.88	21	100	5.91
14	24	110	7.10	28	100	7.78	21	100	5.91
15	24	110	7.02	28	100	7.72	22	110	6.14
16	24	110	7.05	28	110	8.05	22	110	6.27
17	24	110	6.96	33	100	9.25	21	110	6.05
18	23	110	6.85	32	96	8.15	21	110	6.01
19	23	110	6.63	30	98	7.81	21	110	6.03
20	24	110	6.90	28	100	7.66	21	110	6.12
21	31	110	8.91	28	100	7.70	20	110	5.93
22	30	110	8.82	28	100	7.67	25	100	6.62
23	34	100	9.46	28	100	7.69	23	88	5.55
24	32	100	8.90	30	100	8.06	19	94	4.92
25	31	100	8.62	28	100	7.74	19	100	5.09
26	30	110	8.63	28	100	7.91	19	100	5.19
27	31	110	8.70	27	100	7.71	19	100	5.37
28	30	110	8.64	28	100	7.76	19	100	5.26
29	31	110	8.90	27	100	7.65	18	110	5.38
30	30	110	9.01	27	100	7.55	18	110	5.37
31	33	110	9.41	27	100	7.53	---	---	---
TOTAL	850	---	242.29	896	---	250.69	644	---	180.33
YEAR	6383.2		1797.99						



01104455 STONY BROOK, UNNAMED TRIBUTARY 1, NEAR WALTHAM, MA--Continued

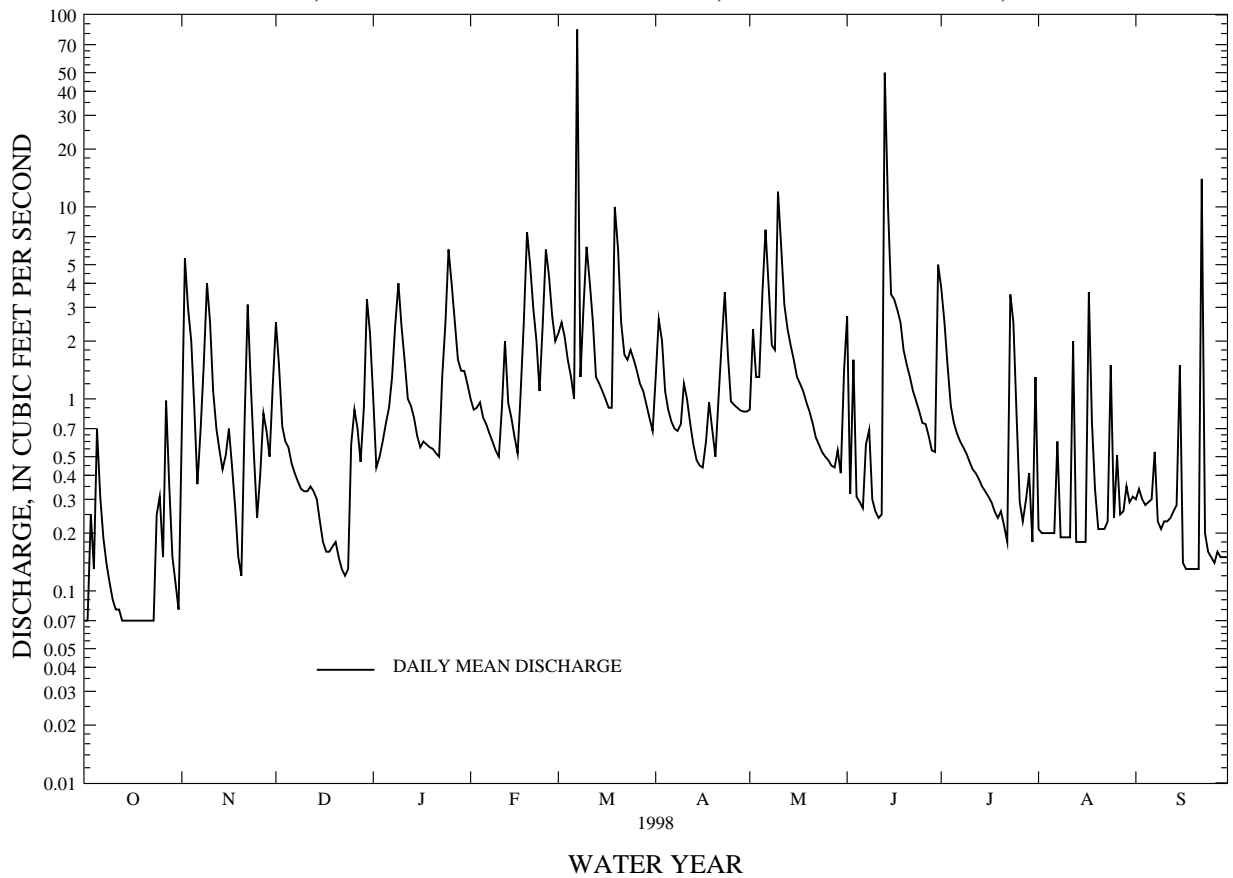
SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	561.14	
ANNUAL MEAN	1.54	
HIGHEST DAILY MEAN	84	Mar 7
LOWEST DAILY MEAN	.07	Oct 1
ANNUAL SEVEN-DAY MINIMUM	.07	Oct 13
ANNUAL RUNOFF (CFSM)	3.20	
ANNUAL RUNOFF (INCHES)	43.49	
10 PERCENT EXCEEDS	2.8	
50 PERCENT EXCEEDS	.64	
90 PERCENT EXCEEDS	.15	

e Estimated

STONY BROOK, UNNAMED TRIBUTARY 1, NEAR WALTHAM, MA 01104455





## CHARLES RIVER BASIN

01104455 STONY BROOK, UNNAMED TRIBUTARY 1, NEAR WALTHAM, MA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
22...	1230	0.05	710	7.7	--	11.9	--	9.7	--	36
27...	1530	.12	272	6.5	--	11.0	747	9.2	85	--
NOV										
20...	0920	.13	822	6.6	--	10.4	760	8.7	78	--
22...	1330	.40	325	6.3	--	6.6	760	11.6	95	12
DEC										
17...	1100	.16	816	6.3	--	9.8	756	9.8	87	33
JAN										
14...	1100	.93	656	6.7	--	7.0	770	10.8	88	30
FEB										
13...	1425	.95	590	6.6	7.5	7.8	753	--	--	26
MAR										
18...	1100	.90	700	6.4	4.0	8.0	771	9.9	83	31
19...	1030	10	131	6.1	--	5.0	762	11.0	86	5.3
19...	1345	7.0	142	6.2	6.0	5.8	761	12.8	102	7.0
22...	0900	1.6	17400	6.2	-1.9	4.5	741	--	--	67
22...	1315	1.6	6380	6.6	.0	5.9	741	--	--	49
APR										
14...	1245	.48	514	6.8	22.0	10.3	755	--	--	32
MAY										
13...	1130	2.2	573	6.5	11.7	10.6	767	9.2	82	23
20...	1115	.90	720	6.8	36.0	11.6	752	--	--	30
JUL										
08...	1100	.33	753	7.0	28.1	12.8	758	8.5	81	31
30...	0945	.19	748	6.8	21.5	13.3	756	--	--	31
AUG										
12...	1050	.17	696	7.0	20.2	14.0	759	8.1	79	--
SEP										
22...	1000	.12	554	6.5	19.0	16.3	753	7.6	79	20

CHARLES RIVER BASIN

01104455 STONY BROOK, UNNAMED TRIBUTARY 1, NEAR WALTHAM, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
22...	7.1	93	2.3	52	27	170	<0.10	14	407	<0.010
27...	--	--	--	--	--	--	--	--	--	.041
NOV										
20...	--	--	--	--	27	--	--	--	--	<.010
22...	2.0	45	1.4	--	11	74	<.10	3.8	178	.018
DEC										
17...	6.7	99	2.1	--	29	180	<.10	11	476	<.010
JAN										
14...	5.5	87	1.8	38	25	150	.11	12	354	<.010
FEB										
13...	--	80	--	--	--	140	--	--	--	--
MAR										
18...	5.7	92	2.0	--	22	160	<.10	12	380	<.010
19...	.95	18	.49	--	4.8	20	<.10	2.5	49	.022
19...	1.2	20	.67	--	7.2	30	<.10	3.6	80	.016
22...	14	3600	7.4	--	85	5800	<.50	8.0	9730	<.010
22...	11	1220	5.2	--	54	2000	<.10	9.1	3490	<.010
APR										
14...	--	99	--	--	--	180	--	--	--	.011
MAY										
13...	3.9	72	1.9	--	22	130	--	11	296	<.010
20...	--	95	--	--	--	160	--	--	--	--
JUL										
08...	6.0	104	2.2	--	26	170	<.10	14	408	<.010
30...	--	99	--	--	--	170	--	--	--	--
AUG										
12...	--	--	--	--	26	--	--	--	--	.013
SEP										
22...	3.6	74	2.6	--	25	110	.44	8.3	298	.041

## CHARLES RIVER BASIN

01104455 STONY BROOK, UNNAMED TRIBUTARY 1, NEAR WALTHAM, MA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
22...	1.85	0.024	<0.20	<0.20	<0.010	<0.010	0.010	10	86	1.7
27...	.741	.226	.62	.49	.013	<.010	<.010	--	--	4.3
NOV										
20...	1.64	<.020	.17	.13	<.010	<.010	.020	32	251	1.5
22...	.632	.194	.28	.31	.012	<.010	.024	35	95	--
DEC										
17...	1.92	<.020	<.10	<.10	.088	<.010	<.010	21	169	--
JAN										
14...	1.45	<.020	<.10	.10	<.010	<.010	.011	56	121	--
FEB										
13...	--	--	--	--	--	--	--	--	--	--
MAR										
18...	1.74	.044	<.10	.11	<.010	<.010	.003	64	178	1.5
19...	.255	.388	.39	.44	<.010	<.010	<.001	25	33	2.3
19...	.348	.299	.27	.40	.018	.012	.008	33	45	2.5
22...	1.21	.280	.23	.31	<.010	<.010	<.010	<100	164	--
22...	1.31	.185	.25	.30	<.010	<.010	<.010	73	169	--
APR										
14...	1.82	.031	<.10	<.10	<.010	<.010	.003	--	--	--
MAY										
13...	1.38	.049	.17	.13	<.010	<.010	.002	190	227	--
20...	--	--	--	--	--	--	--	--	--	--
JUL										
08...	2.00	.048	.13	<.10	<.010	.015	.006	27	138	--
30...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	2.03	.086	<.10	.11	<.010	<.010	.009	22	110	--
SEP										
22...	2.13	1.23	2.1	.22	.100	.191	.021	110	131	--



Streamflow discharge measurement by cable-car on diversion canal, Connecticut River at Thompsonville, Conn., 1939.



01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

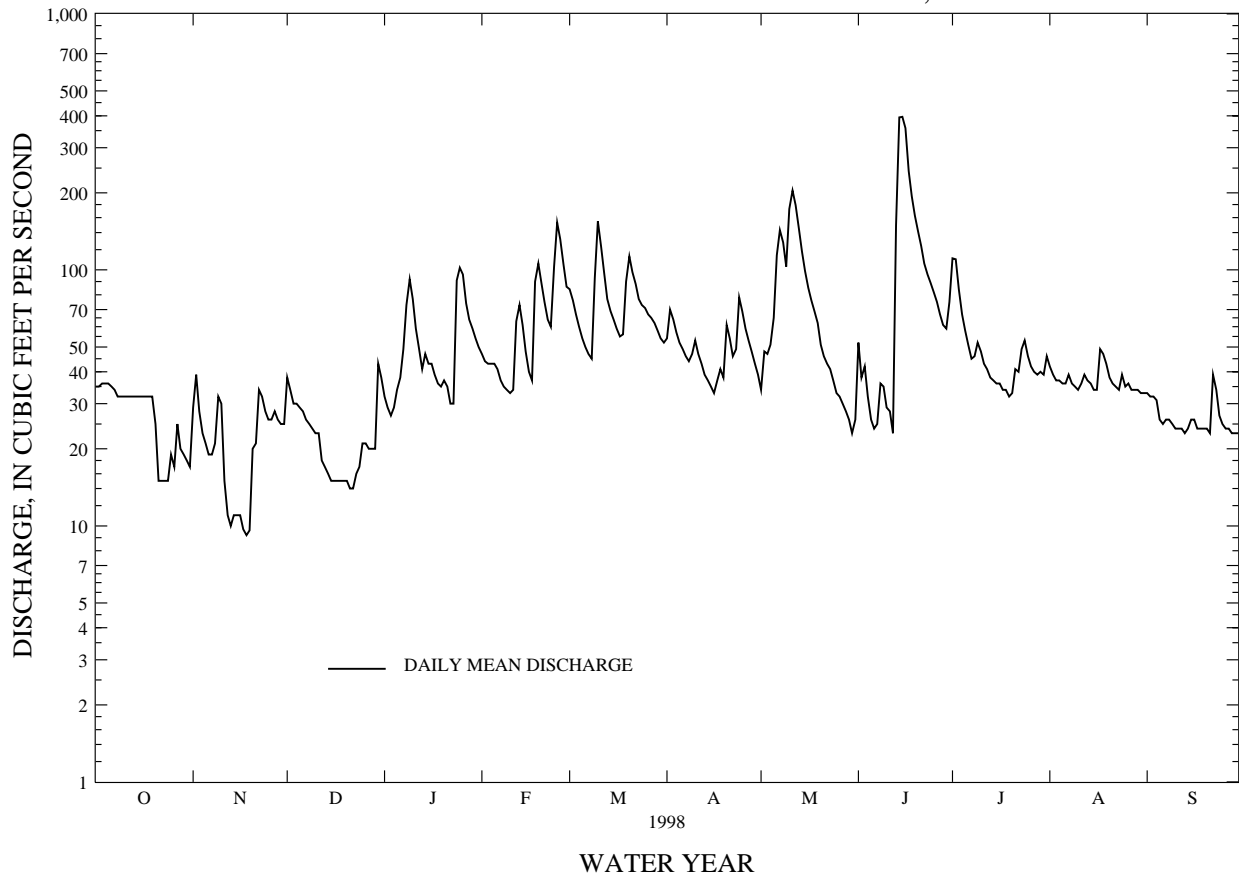
SUMMARY STATISTICS

FOR 1998 WATER YEAR

ANNUAL TOTAL	18459.5	
ANNUAL MEAN	50.6	
HIGHEST DAILY MEAN	396	Jun 15
LOWEST DAILY MEAN	9.2	Nov 18
ANNUAL SEVEN-DAY MINIMUM	10	Nov 13
INSTANTANEOUS PEAK FLOW	428	Jun 14
INSTANTANEOUS PEAK STAGE	8.98	Jun 14
INSTANTANEOUS LOW FLOW	8.8	Nov 19
10 PERCENT EXCEEDS	92	
50 PERCENT EXCEEDS	37	
90 PERCENT EXCEEDS	20	

e Estimated

STONY BROOK AT ROUTE 20 NEAR WALTHAM, MA 01104460



CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to September 1998.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1997 to September 1998.

WATER TEMPERATURE: October 1997 to September 1998.

CALCIUM CONCENTRATION: October 1997 to September 1998.

CALCIUM LOAD: October 1997 to September 1998.

SODIUM CONCENTRATION: October 1997 to September 1998.

SODIUM LOAD: October 1997 to September 1998.

CHLORIDE CONCENTRATION: October 1997 to September 1998.

CHLORIDE LOAD: October 1997 to September 1998.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

REMARKS.--Records good, except those for estimated daily specific conductances, which are poor. Calcium, sodium, and chloride concentrations and loads records are good, except those for which have estimated daily discharge and/or specific conductance.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,860 µS/cm, Jan. 23; minimum, 45 µS/cm, June 15.

WATER TEMPERATURE: Maximum recorded, 23.6°C, Aug. 27, 28; minimum, 0.2°C, Dec. 23.

CALCIUM CONCENTRATION: Maximum daily mean, 25 mg/L, Jan. 23; minimum daily mean, 7.5 mg/L, June 15.

CALCIUM LOAD: Maximum daily, 8.69 tons, June 16; minimum daily, 0.38 tons, Nov. 18.

SODIUM CONCENTRATION: Maximum daily mean, 113 mg/L, Jan. 23; minimum daily mean, 8.6 mg/L, June 15.

SODIUM LOAD: Maximum daily, 13.4 tons, Jan. 25; minimum daily, 0.92 tons, Nov. 18.

CHLORIDE CONCENTRATION: Maximum daily mean, 220 mg/L, Jan. 23; minimum daily mean, 14 mg/L, June 15.

CHLORIDE LOAD: Maximum daily, 24.4 tons, Jan. 25; minimum daily, 1.64 tons, Nov. 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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 SATUR-ATION (PER-CENT) (00301)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT										
22...	1113	17	497	7.2	--	10.0	770	--	--	20
22...	1345	16	481	--	--	11.1	--	10.0	--	21
27...	1615	25	453	7.0	--	9.2	747	10.9	97	--
NOV										
20...	1030	21	410	6.9	5.9	2.9	760	11.6	86	--
21...	0900	19	440	7.1	--	2.8	772	--	--	19
22...	1400	40	345	6.7	--	3.6	759	12.3	93	17
DEC										
17...	1015	14	419	6.8	10.5	1.9	752	--	--	21
17...	1200	15	417	5.4	--	2.2	754	13.0	96	--
JAN										
14...	1145	43	249	6.4	--	1.2	770	13.4	93	16
FEB										
13...	1240	68	240	6.6	7.6	3.6	753	--	--	13
MAR										
18...	1200	55	236	6.7	3.9	3.7	771	12.0	90	14
19...	1145	90	197	6.2	--	4.1	762	13.0	99	12
19...	1445	102	198	6.3	7.0	4.3	761	11.3	87	12
25...	1030	65	246	6.9	11.5	3.8	771	--	--	13
APR										
16...	1130	33	347	6.9	19.4	11.8	758	--	--	17
MAY										
13...	1230	143	163	6.6	13.5	11.9	767	9.3	86	--
20...	0945	51	257	7.1	21.0	15.5	752	--	--	14
JUN										
05...	1200	28	312	6.3	19.5	15.0	746	--	--	16
JUL										
08...	1130	43	323	6.9	25.4	19.9	758	8.1	90	17
30...	0800	43	418	7.2	19.4	19.8	756	--	--	18
AUG										
12...	1140	37	406	6.8	19.7	21.1	760	7.4	83	--
SEP										
22...	1100	22	433	6.8	20.9	20.7	752	8.1	92	17

CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT										
22...	--	66	--	--	--	120	--	--	--	--
22...	4.0	68	2.2	23	14	120	<0.10	3.2	271	<0.010
27...	--	--	--	--	--	--	--	--	--	<.010
NOV										
20...	--	--	--	--	17	--	--	--	--	<.010
21...	--	52	--	--	--	100	--	--	--	--
22...	3.4	41	2.6	--	18	79	<.10	6.1	203	<.010
DEC										
17...	--	48	--	--	--	92	--	--	--	--
17...	--	--	--	--	15	--	--	--	--	<.010
JAN										
14...	3.2	27	1.9	24	19	49	<.10	9.2	155	<.010
FEB										
13...	--	28	--	--	--	49	--	--	--	--
MAR										
18...	2.9	25	1.6	--	14	46	<.10	7.6	140	<.010
19...	2.5	24	1.4	--	12	37	<.10	6.4	118	<.010
19...	2.4	24	1.4	--	12	42	<.10	6.5	123	<.010
25...	--	29	--	--	--	51	--	--	--	--
APR										
16...	--	42	--	--	--	78	--	--	--	<.010
MAY										
13...	--	--	--	--	11	--	--	--	--	<.010
20...	--	28	--	--	--	47	--	--	--	--
JUN										
05...	--	37	--	--	--	67	--	--	--	--
JUL										
08...	3.1	42	1.7	--	11	70	<.10	6.9	193	.014
30...	--	56	--	--	--	100	--	--	--	--
AUG										
12...	--	--	--	--	10	--	--	--	--	.027
SEP										
22...	3.1	58	2.0	--	12	100	<.10	3.9	232	<.010



## CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
22...	--	--	--	--	--	--	--	--	--	--
22...	0.093	<0.015	0.23	<0.20	<0.010	<0.010	<0.010	83	124	4.1
27...	.138	<.015	.33	<.20	<.010	<.010	<.010	--	--	4.8
NOV										
20...	.250	.107	.47	.32	.017	<.010	.016	170	367	4.7
21...	--	--	--	--	--	--	--	--	--	--
22...	.262	<.020	.32	.24	<.010	<.010	.017	130	162	--
DEC										
17...	--	--	--	--	--	--	--	--	--	--
17...	.485	<.020	.31	.24	<.010	<.010	<.010	220	255	--
JAN										
14...	.699	<.020	.33	.23	.012	<.010	.018	190	159	--
FEB										
13...	--	--	--	--	--	--	--	--	--	--
MAR										
18...	.610	.050	.26	.23	<.010	<.010	<.001	130	83	4.6
19...	.098	.043	.24	<.10	<.010	<.010	.001	110	65	4.5
19...	.277	.048	.27	.23	<.010	<.010	<.001	100	62	4.6
25...	--	--	--	--	--	--	--	--	--	--
APR										
16...	.441	.047	.33	.33	.015	<.010	.001	--	--	--
MAY										
13...	.339	.030	.41	.39	<.010	<.010	<.001	220	42	--
20...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	--	--	--	--	--	--	--	--	--	--
JUL										
08...	.249	.096	.54	.36	.061	<.010	.004	380	297	--
30...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	.287	.149	.41	.36	.012	<.010	.001	310	214	--
SEP										
22...	.166	.032	--	--	.026	<.010	.001	61	139	--

CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	e498	e498	e498	458	231	393	346	311	325	340	301	320			
2	e498	e498	e498	371	318	356	331	314	320	350	322	340			
3	e498	e455	e488	357	347	353	336	320	329	355	350	352			
4	e488	e488	e488	383	356	369	618	334	360	367	340	356			
5	e488	e450	e478	396	383	390	390	336	341	340	316	328			
6	e483	e483	e483	402	395	398	349	340	345	323	295	308			
7	e484	e483	e483	410	400	404	358	349	354	308	277	291			
8	e488	e484	e486	410	356	392	363	357	360	e274	e246	e256			
9	e490	e488	e489	386	314	352	371	361	366	e256	e236	e247			
10	e494	e490	e492	341	319	337	375	369	373	e243	e241	e242			
11	e494	e494	e494	319	290	299	383	373	379	e246	e243	e245			
12	e495	e494	e495	299	290	294	373	363	366	e249	e246	e247			
13	e497	e495	e496	308	297	302	366	362	364	e514	e249	e277			
14	e497	e497	e497	405	294	335	370	360	367	e250	e250	e250			
15	e497	e497	e497	676	329	523	380	356	368	e546	e250	e263			
16	e497	e497	e497	545	321	371	387	370	380	e786	e275	e479			
17	e497	e497	e497	325	296	307	390	382	386	e348	e300	e306			
18	e497	e497	e497	318	299	308	392	382	388	e810	e300	e494			
19	e497	e497	e497	311	298	304	393	386	390	e521	e300	e381			
20	e497	e491	e494	403	302	367	392	384	389	e607	e305	e434			
21	e492	e489	e489	416	395	403	393	381	388	e300	e300	e300			
22	e489	e489	e489	749	334	371	404	380	393	e300	e300	e300			
23	e489	e489	e489	359	340	349	1180	402	623	e1860	e300	e750			
24	e489	e489	e489	350	344	348	682	396	527	e1080	e250	e354			
25	e489	e450	e478	362	345	354	1520	394	536	e875	e250	e383			
26	e486	e470	e478	504	358	366	429	392	403	e301	e301	e301			
27	e486	e430	e453	497	351	364	414	387	392	e302	e302	e302			
28	e452	e451	e452	375	363	365	446	364	400	e303	e303	e303			
29	e451	e451	e451	378	365	369	977	361	396	e304	e304	e304			
30	e452	e441	e451	408	344	375	416	327	340	e305	e305	e305			
31	456	451	453	---	---	---	336	301	324	e306	e306	e306			
MONTH	498	430	484	749	231	361	1520	301	386	1860	236	333			
DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	e307	e307	e307	206	195	201	600	300	313	295	290	292			
2	e308	e308	e308	202	197	200	308	266	278	322	245	272			
3	e311	e308	e309	201	197	199	266	261	264	279	240	258			
4	312	308	310	206	201	203	267	261	263	257	232	246			
5	472	310	361	210	204	207	272	267	269	246	187	233			
6	333	307	319	214	209	211	277	272	274	220	182	199			
7	328	309	321	216	212	213	286	276	281	189	162	174			
8	332	323	328	226	205	216	331	282	286	171	167	169			
9	340	321	332	212	164	198	297	265	282	183	171	175			
10	343	330	336	183	158	172	275	263	271	187	141	173			
11	338	325	332	173	158	165	295	266	274	179	136	157			
12	1060	262	330	183	173	178	292	280	287	150	145	147			
13	262	228	239	192	167	182	299	286	293	166	150	158			
14	239	220	231	209	191	196	309	293	301	182	165	174			
15	257	225	243	199	195	196	315	303	308	195	182	188			
16	273	254	265	200	195	198	322	311	316	206	195	200			
17	516	272	281	207	197	201	345	276	315	219	206	211			
18	675	196	272	252	207	227	309	296	300	224	217	220			
19	212	184	189	244	205	216	322	285	300	237	224	230			
20	193	185	189	208	188	195	307	200	266	251	237	243			
21	202	193	198	492	189	246	270	254	262	256	246	249			
22	208	201	205	554	213	327	288	268	277	264	255	259			
23	242	203	216	248	205	223	318	240	284	269	261	264			
24	262	213	234	237	218	227	264	240	255	276	269	273			
25	222	187	198	252	233	239	242	234	237	283	276	279			
26	192	186	189	269	247	256	255	241	247	290	282	285			
27	197	190	194	262	245	253	282	252	263	300	290	294			
28	210	196	199	272	256	263	283	266	275	307	300	302			
29	---	---	---	278	270	275	301	282	291	341	303	312			
30	---	---	---	284	272	278	303	290	298	344	315	325			
31	---	---	---	307	280	287	---	---	---	354	266	329			
MONTH	1060	184	266	554	158	221	600	200	281	354	136	235			

e Estimated

CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	279	220	266	260	209	245	379	370	374	405	398	400
2	275	260	267	250	230	242	394	378	385	409	400	402
3	331	268	276	265	245	253	401	392	396	408	400	404
4	291	276	283	285	265	274	405	399	401	408	402	405
5	307	291	299	294	283	287	407	402	404	403	400	402
6	312	301	307	304	292	298	407	404	405	405	401	403
7	341	302	313	311	303	307	417	364	398	409	376	401
8	316	261	276	329	305	314	399	394	397	405	397	401
9	264	256	259	335	327	331	399	394	396	405	403	404
10	285	264	274	343	333	338	401	398	399	406	401	403
11	292	276	282	354	342	347	403	315	394	410	404	407
12	316	292	305	356	345	352	390	358	383	412	408	409
13	323	111	202	371	356	363	387	381	384	411	409	410
14	115	60	100	373	363	367	394	387	390	409	402	405
15	110	45	89	378	367	371	400	393	397	413	255	397
16	148	72	124	381	371	376	400	398	399	412	399	405
17	180	148	164	388	376	382	400	286	357	408	404	406
18	206	180	193	386	374	380	348	323	337	410	404	406
19	225	206	217	381	373	377	361	334	348	410	407	408
20	234	225	230	390	375	378	382	361	371	413	410	411
21	250	234	243	392	383	388	390	379	384	415	412	413
22	268	248	257	394	389	392	395	388	391	417	161	360
23	274	267	271	393	306	366	397	392	394	332	312	322
24	280	273	276	331	314	322	399	340	380	361	325	342
25	285	279	282	353	331	342	401	385	392	381	361	371
26	294	285	289	368	353	361	407	361	395	392	381	386
27	295	293	293	377	368	372	399	395	397	394	390	393
28	297	293	295	383	375	379	401	397	399	399	394	396
29	297	291	293	386	351	377	404	396	398	403	399	400
30	313	243	278	407	375	395	400	397	399	405	402	404
31	---	---	---	408	339	375	401	398	399	---	---	---
MONTH	341	45	250	408	209	344	417	286	388	417	161	396
YEAR	1860	45	329									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.9	8.7	10.0	3.7	2.2	3.3	1.1	0.4	0.7
2	---	---	---	13.0	10.6	11.5	2.4	1.4	1.8	2.5	1.1	1.8
3	---	---	---	12.1	10.7	11.3	2.7	1.2	1.9	3.7	2.0	2.8
4	---	---	---	11.6	9.9	10.6	3.7	2.1	2.9	4.0	2.8	3.3
5	---	---	---	10.8	9.1	9.9	3.9	3.1	3.4	3.7	2.8	3.1
6	---	---	---	9.9	8.0	8.9	3.3	2.3	2.7	4.2	3.0	3.5
7	---	---	---	9.5	8.5	9.0	3.4	2.0	2.6	3.5	2.4	3.0
8	---	---	---	9.4	9.0	9.1	3.4	2.1	2.7	2.5	2.1	2.3
9	---	---	---	9.3	8.9	9.0	3.0	1.5	2.2	2.6	2.1	2.4
10	---	---	---	9.6	8.8	9.1	3.2	2.0	2.5	2.7	1.5	2.2
11	---	---	---	9.1	7.0	8.5	3.0	1.8	2.5	2.8	1.5	2.1
12	---	---	---	7.0	5.1	5.8	3.5	1.7	2.6	2.5	1.4	1.9
13	---	---	---	5.1	3.4	4.3	3.5	2.0	2.7	3.3	1.6	2.5
14	---	---	---	4.0	.6	2.2	3.2	1.2	2.4	2.7	1.3	2.0
15	---	---	---	3.5	1.0	2.4	2.3	.8	1.5	2.5	1.6	2.0
16	---	---	---	3.7	2.6	3.2	2.8	1.1	1.8	2.1	1.5	1.8
17	---	---	---	3.7	1.7	2.7	3.6	1.5	2.4	2.2	1.6	1.8
18	---	---	---	4.2	2.1	3.1	3.2	1.4	2.2	2.0	1.6	1.8
19	---	---	---	3.6	1.7	2.7	3.8	1.7	2.8	2.6	1.5	2.0
20	---	---	---	4.4	2.3	3.2	3.9	2.2	3.0	2.8	2.0	2.4
21	---	---	---	5.1	2.7	3.8	2.8	1.2	1.9	2.6	1.5	2.0
22	---	---	---	4.8	3.5	4.1	2.3	.7	1.5	1.9	.8	1.4
23	---	---	---	3.5	3.0	3.1	2.3	.2	1.3	1.3	.6	1.0
24	---	---	---	4.1	2.7	3.2	2.6	1.8	2.1	1.4	.9	1.1
25	---	---	---	2.9	1.4	2.3	2.8	1.8	2.3	1.5	.7	1.1
26	---	---	---	4.4	2.6	3.4	3.7	2.1	2.8	1.9	.9	1.4
27	---	---	---	4.3	2.4	3.7	2.9	2.0	2.5	1.8	1.0	1.3
28	---	---	---	2.9	2.0	2.5	2.6	.8	2.1	2.0	1.3	1.7
29	---	---	---	3.5	2.2	2.7	3.1	.5	1.4	2.8	1.6	2.1
30	---	---	---	3.6	1.8	2.7	2.5	1.7	2.2	2.6	1.7	2.2
31	9.5	7.0	8.2	---	---	---	2.2	.5	1.6	2.8	1.9	2.4
MONTH	---	---	---	13.0	.6	5.6	3.9	.2	2.3	4.2	.4	2.0

CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.9	1.3	2.0	6.1	5.7	5.9	16.0	10.7	13.3	16.6	13.9	15.5
2	3.3	1.3	2.3	7.8	5.4	6.4	10.7	9.7	10.1	16.0	14.2	15.2
3	3.8	2.3	3.0	6.5	5.6	6.0	11.6	9.2	10.3	16.5	14.6	15.3
4	3.3	2.4	2.9	7.0	4.6	5.9	9.9	8.4	9.1	16.4	13.9	15.1
5	2.7	1.8	2.2	6.3	5.2	5.9	8.4	7.3	7.7	16.8	14.4	15.5
6	3.0	1.1	1.9	6.4	4.2	5.3	8.7	6.7	7.7	15.9	14.5	15.1
7	3.0	1.0	1.9	6.1	5.1	5.6	11.6	6.4	8.8	15.2	14.6	14.9
8	3.0	1.5	2.1	6.5	4.5	5.6	11.6	8.1	9.9	15.9	14.2	14.9
9	3.3	1.0	2.1	9.5	5.2	6.4	11.4	9.5	10.4	15.1	13.4	14.1
10	3.9	1.3	2.5	9.2	6.3	8.3	12.1	8.5	10.2	13.4	11.9	12.5
11	4.8	2.5	3.5	6.3	3.3	4.9	12.5	8.1	10.2	11.9	10.7	11.3
12	4.8	3.5	4.3	3.3	.9	2.2	12.8	8.4	10.5	14.1	10.4	12.0
13	4.4	2.4	3.3	3.3	.3	1.7	13.2	8.5	10.9	14.3	11.1	12.5
14	2.7	.9	1.8	3.2	1.8	2.5	14.0	9.4	11.6	15.5	11.2	13.2
15	2.3	.5	1.3	4.1	2.0	3.0	13.3	10.4	11.7	17.2	11.9	14.5
16	3.0	.8	1.8	4.8	2.2	3.4	13.9	11.2	12.5	18.2	14.6	16.3
17	3.2	1.9	2.5	5.7	2.0	3.8	14.2	12.8	13.3	16.6	14.8	15.6
18	2.6	1.9	2.2	4.9	3.3	4.2	14.7	11.7	13.2	18.6	14.3	16.4
19	2.4	1.8	2.1	4.6	4.0	4.4	13.2	12.0	12.7	19.0	15.6	17.3
20	4.4	1.5	2.9	4.3	3.8	4.0	12.5	11.1	11.7	18.4	15.4	16.9
21	4.7	3.1	3.8	3.8	2.0	2.8	14.7	9.5	12.0	19.0	16.1	17.6
22	5.6	2.8	4.1	2.0	.6	1.1	15.9	10.8	13.2	18.1	15.2	16.8
23	4.0	2.6	3.4	4.6	1.0	2.6	14.1	10.6	12.4	18.1	14.5	16.3
24	4.0	3.0	3.6	6.5	1.9	4.1	11.9	9.9	10.7	18.6	14.8	16.8
25	4.5	3.4	3.8	7.5	3.0	5.2	12.3	10.2	11.2	17.3	15.2	16.4
26	5.9	2.9	4.2	8.5	4.5	6.5	11.1	9.2	10.3	18.3	15.0	16.8
27	6.5	3.5	4.8	11.9	7.2	9.5	13.5	9.6	11.4	18.9	15.3	17.1
28	6.9	4.0	5.5	14.1	10.2	12.0	12.9	9.6	11.3	20.0	15.9	17.9
29	---	---	---	14.6	11.7	13.2	15.4	9.5	12.4	21.0	17.5	19.2
30	---	---	---	15.4	11.1	13.4	17.5	12.6	14.8	21.6	18.2	19.7
31	---	---	---	17.7	13.5	15.5	---	---	---	19.4	17.0	18.2
MONTH	6.9	.5	2.9	17.7	.3	5.8	17.5	6.4	11.2	21.6	10.4	15.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.2	17.8	18.9	19.8	18.5	19.0	21.6	18.8	20.1	22.5	20.2	21.4
2	19.0	16.5	17.9	20.5	18.0	19.2	21.8	19.1	20.4	22.3	20.6	21.5
3	18.6	16.6	17.4	21.1	18.8	20.1	22.3	19.6	20.9	22.6	20.5	21.7
4	16.7	14.6	15.7	21.4	19.6	20.6	22.1	20.1	21.1	22.7	20.7	21.8
5	17.4	13.9	15.5	21.6	20.0	20.8	22.3	19.9	21.1	21.9	20.1	21.0
6	16.7	14.6	15.8	21.3	19.2	20.3	22.3	20.6	21.4	22.3	19.7	21.0
7	16.3	15.1	15.6	21.0	19.3	20.2	21.9	20.7	21.3	22.1	21.3	21.7
8	15.5	14.6	15.1	20.5	19.2	19.7	22.8	20.6	21.6	21.8	20.6	21.2
9	17.8	14.4	15.9	20.6	18.6	19.9	22.8	20.5	21.7	20.6	19.2	19.9
10	19.4	15.7	17.4	21.2	19.1	20.0	23.0	21.1	22.1	20.2	18.4	19.4
11	18.9	16.2	17.6	19.9	18.2	19.1	22.8	21.7	22.1	20.5	18.0	19.3
12	17.7	16.3	16.8	20.0	17.6	18.8	21.9	20.5	21.0	20.9	18.6	19.8
13	17.7	16.4	17.0	20.9	18.0	19.4	22.0	19.9	20.9	21.0	19.9	20.4
14	17.1	16.5	16.9	21.7	19.0	20.3	22.2	20.1	21.1	20.0	19.3	19.7
15	18.2	16.6	17.3	22.1	19.6	20.9	22.5	20.7	21.6	22.2	19.6	20.4
16	17.6	17.1	17.3	22.2	20.3	21.2	23.3	21.3	22.3	22.2	20.5	21.1
17	17.5	16.7	17.2	21.9	20.4	21.2	22.5	21.2	21.7	20.7	18.7	19.8
18	18.6	17.0	17.8	22.7	20.1	21.2	23.5	21.1	21.9	20.2	18.7	19.5
19	19.0	17.5	18.3	21.7	19.2	20.5	21.8	20.2	21.1	20.5	18.2	19.5
20	19.5	18.2	18.8	20.8	19.8	20.2	21.7	19.2	20.5	21.4	19.3	20.4
21	19.9	18.5	19.1	21.8	19.5	20.6	22.1	20.3	21.1	21.4	20.3	20.8
22	19.6	18.4	19.0	22.2	20.2	21.1	22.8	20.2	21.5	21.3	19.4	20.4
23	19.2	18.3	18.6	22.9	20.4	21.1	22.1	20.8	21.6	19.4	16.8	18.2
24	20.4	18.3	19.3	21.9	20.4	21.0	23.3	21.3	22.3	17.3	15.2	16.4
25	21.3	19.4	20.3	21.1	19.1	20.2	23.4	22.0	22.7	17.7	15.6	16.8
26	21.8	20.4	21.1	21.5	19.2	20.2	22.9	21.7	22.4	19.5	17.3	18.4
27	21.4	19.8	20.9	21.1	18.9	20.1	23.6	21.8	22.7	20.6	18.7	19.6
28	20.1	18.5	19.3	21.7	19.7	20.7	23.6	21.6	22.7	20.2	18.6	19.6
29	19.4	18.4	18.9	22.6	20.4	21.1	22.8	21.7	22.1	18.6	16.8	17.8
30	19.1	18.5	18.8	21.6	19.8	20.7	23.1	21.6	22.3	18.3	16.8	17.6
31	---	---	---	21.0	19.7	20.2	22.3	21.4	21.7	---	---	---
MONTH	21.8	13.9	17.9	22.9	17.6	20.3	23.6	18.8	21.6	22.7	15.2	19.9

## CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e35	20	1.93	29	18	1.29	38	16	1.62
2	e35	20	1.93	39	17	1.78	34	16	1.46
3	e36	20	1.97	28	17	1.25	30	16	1.31
4	e36	20	1.97	23	17	1.06	30	17	1.35
5	e36	20	1.94	21	18	.98	29	16	1.28
6	e35	20	1.90	19	18	.93	28	17	1.23
7	e34	20	1.85	19	18	.91	26	17	1.17
8	e32	20	1.74	21	18	1.03	25	17	1.13
9	e32	20	1.75	32	17	1.41	24	17	1.09
10	e32	20	1.75	30	16	1.31	23	17	1.07
11	e32	20	1.76	15	15	.61	23	17	1.07
12	e32	20	1.76	11	15	.46	18	17	.82
13	e32	20	1.76	10	15	.42	17	17	.77
14	e32	20	1.77	11	16	.48	16	17	.76
15	e32	20	1.77	11	21	.62	15	17	.71
16	e32	20	1.77	11	17	.49	15	17	.71
17	e32	20	1.77	9.7	15	.40	15	18	.71
18	e32	20	1.77	9.2	15	.38	15	18	.70
19	e32	20	1.77	9.6	15	.40	15	18	.70
20	e25	20	1.38	20	17	.94	15	18	.69
21	e15	20	.82	21	18	1.03	14	18	.68
22	e15	20	.82	34	17	1.57	14	18	.65
23	e15	20	.82	32	17	1.43	16	23	.99
24	e15	20	.82	28	17	1.28	17	21	.99
25	e19	20	1.02	26	17	1.19	21	21	1.18
26	e17	20	.92	26	17	1.21	21	18	1.02
27	e25	19	1.31	28	17	1.30	20	18	.98
28	e20	19	1.04	26	17	1.21	20	18	.95
29	e19	19	.99	25	17	1.17	20	18	.98
30	e18	19	.94	25	17	1.19	43	16	1.88
31	17	19	.89	---	---	---	38	16	1.65
TOTAL	851	---	46.40	649.5	---	29.73	695	---	32.30

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	32	16	1.36	47	15	1.95	84	12	2.74
2	29	16	1.27	44	15	1.84	76	12	2.45
3	27	17	1.24	43	16	1.79	67	12	2.16
4	29	17	1.34	43	16	1.81	60	12	1.96
5	34	16	1.48	43	17	1.97	54	12	1.79
6	38	15	1.58	41	16	1.73	50	12	1.67
7	49	15	1.97	37	16	1.60	47	12	1.59
8	73	14	2.75	35	16	1.53	45	13	1.52
9	92	14	3.38	34	16	1.48	93	12	2.99
10	77	13	2.80	33	16	1.46	155	11	4.59
11	59	14	2.14	34	16	1.46	123	11	3.56
12	49	14	1.81	63	16	2.69	97	11	2.92
13	41	14	1.59	73	13	2.64	77	11	2.36
14	47	14	1.72	61	13	2.16	69	12	2.20
15	43	14	1.63	48	13	1.74	64	12	2.06
16	43	20	2.33	40	14	1.52	59	12	1.91
17	39	15	1.63	37	15	1.47	55	12	1.79
18	36	20	1.96	90	14	3.29	56	13	1.95
19	35	17	1.66	106	12	3.31	90	13	3.04
20	37	19	1.88	89	12	2.79	113	12	3.60
21	35	15	1.44	75	12	2.42	98	13	3.52
22	30	15	1.25	64	12	2.11	88	16	3.75
23	30	25	2.10	60	13	2.03	77	13	2.66
24	91	16	3.85	103	13	3.64	73	13	2.56
25	102	17	4.72	153	12	4.95	71	13	2.55
26	96	15	3.94	132	12	4.15	67	14	2.52
27	74	15	3.04	105	12	3.33	65	14	2.42
28	64	15	2.63	86	12	2.79	62	14	2.37
29	59	15	2.45	---	---	---	58	14	2.27
30	54	15	2.23	---	---	---	54	15	2.13
31	50	15	2.07	---	---	---	52	15	2.10
TOTAL	1594	---	67.24	1819	---	65.65	2299	---	77.70

e Estimated

CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

CALCIUM DISSOLVED (MG/L AS CA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	54	16	2.28	34	15	1.37	52	14	1.98
2	70	15	2.74	48	14	1.85	38	14	1.46
3	64	14	2.44	47	14	1.76	42	15	1.64
4	57	14	2.18	51	14	1.88	32	15	1.25
5	52	14	2.01	65	13	2.31	26	15	1.09
6	49	14	1.90	114	12	3.68	24	15	1.02
7	46	15	1.81	143	11	4.27	25	16	1.07
8	44	15	1.74	128	11	3.74	36	15	1.42
9	47	15	1.86	103	11	3.07	35	14	1.32
10	53	14	2.05	173	11	5.21	29	14	1.14
11	47	14	1.83	204	10	5.75	28	15	1.12
12	43	15	1.70	179	10	4.85	23	15	.96
13	39	15	1.60	145	10	4.08	149	12	4.14
14	37	15	1.51	118	11	3.53	394	8.0	8.50
15	35	15	1.44	99	12	3.09	396	7.5	7.98
16	33	16	1.40	85	12	2.74	358	9.1	8.69
17	37	16	1.57	76	12	2.53	243	11	6.98
18	41	15	1.67	69	13	2.35	194	12	6.17
19	38	15	1.56	62	13	2.19	163	13	5.54
20	61	14	2.33	51	13	1.83	141	13	4.96
21	54	14	2.04	46	14	1.68	124	13	4.50
22	46	15	1.81	43	14	1.63	106	14	3.97
23	49	15	1.95	41	14	1.57	96	14	3.71
24	78	14	2.91	37	14	1.44	89	15	3.49
25	69	13	2.48	33	15	1.31	82	15	3.23
26	59	14	2.16	32	15	1.29	75	15	3.01
27	53	14	2.01	30	15	1.21	67	15	2.71
28	48	14	1.86	28	15	1.15	61	15	2.50
29	43	15	1.74	26	16	1.11	59	15	2.41
30	39	15	1.60	23	16	1.00	75	15	2.94
31	---	---	---	26	16	1.11	---	---	---
TOTAL	1485	---	58.18	2359	---	76.58	3262	---	100.90

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	111	14	4.05	42	17	1.96	33	18	1.59
2	110	13	4.00	39	18	1.86	32	18	1.58
3	84	14	3.13	37	18	1.81	32	18	1.55
4	67	14	2.60	37	18	1.79	31	18	1.50
5	58	15	2.31	36	18	1.78	26	18	1.25
6	51	15	2.07	36	18	1.74	25	18	1.24
7	45	15	1.86	39	18	1.87	26	18	1.27
8	46	16	1.95	36	18	1.74	26	18	1.26
9	52	16	2.27	35	18	1.69	25	18	1.23
10	48	16	2.11	34	18	1.67	24	18	1.19
11	43	17	1.92	36	18	1.74	24	18	1.17
12	41	17	1.84	39	18	1.84	24	18	1.17
13	38	17	1.76	37	18	1.75	23	18	1.16
14	37	17	1.73	36	18	1.71	24	18	1.18
15	36	17	1.68	34	18	1.67	26	18	1.25
16	36	17	1.67	34	18	1.64	26	18	1.25
17	34	18	1.63	49	17	2.17	24	18	1.20
18	34	17	1.59	47	16	2.09	24	18	1.18
19	32	17	1.50	43	17	1.92	24	18	1.18
20	33	17	1.56	38	17	1.75	24	18	1.19
21	41	18	1.95	36	18	1.70	23	18	1.16
22	40	18	1.91	35	18	1.66	39	17	1.68
23	49	17	2.23	34	18	1.65	34	16	1.45
24	53	16	2.28	39	17	1.82	27	16	1.19
25	46	16	2.03	35	18	1.70	25	17	1.16
26	42	17	1.91	36	18	1.74	24	18	1.13
27	40	17	1.88	34	18	1.64	24	18	1.16
28	39	17	1.84	34	18	1.64	23	18	1.13
29	40	17	1.87	34	18	1.63	23	18	1.11
30	39	18	1.87	33	18	1.61	23	18	1.11
31	46	17	2.14	33	18	1.60	---	---	---
TOTAL	1511	---	65.14	1147	---	54.58	788	---	37.87
YEAR	18459.5		712.27						

## CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e35	66	6.24	29	50	3.43	38	40	4.03
2	e35	66	6.24	39	44	4.69	34	39	3.60
3	e36	65	6.27	28	44	3.26	30	40	3.28
4	e36	65	6.27	23	46	2.86	30	45	3.59
5	e36	63	6.11	21	49	2.74	29	42	3.30
6	e35	64	6.02	19	51	2.63	28	43	3.17
7	e34	64	5.85	19	52	2.59	26	44	3.08
8	e32	64	5.54	21	50	2.87	25	45	2.99
9	e32	65	5.58	32	44	3.68	24	46	2.92
10	e32	65	5.62	30	42	3.34	23	47	2.91
11	e32	65	5.65	15	36	1.45	23	48	2.91
12	e32	66	5.66	11	35	1.08	18	46	2.19
13	e32	66	5.68	10	36	1.01	17	46	2.07
14	e32	66	5.69	11	41	1.23	16	46	2.04
15	e32	66	5.69	11	71	2.09	15	46	1.92
16	e32	66	5.69	11	47	1.33	15	48	1.94
17	e32	66	5.69	9.7	37	.97	15	49	1.96
18	e32	66	5.69	9.2	37	.92	15	49	1.94
19	e32	66	5.69	9.6	37	.96	15	49	1.94
20	e25	65	4.41	20	46	2.54	15	49	1.93
21	e15	65	2.62	21	51	2.93	14	49	1.88
22	e15	65	2.62	34	47	4.21	14	50	1.82
23	e15	65	2.62	32	43	3.71	16	88	3.83
24	e15	65	2.62	28	43	3.32	17	71	3.32
25	e19	63	3.23	26	44	3.13	21	73	4.14
26	e17	63	2.89	26	46	3.25	21	51	2.91
27	e25	59	3.98	28	46	3.48	20	50	2.73
28	e20	59	3.18	26	46	3.23	20	51	2.69
29	e19	59	3.01	25	46	3.14	20	51	2.85
30	e18	59	2.85	25	47	3.23	43	42	4.82
31	17	59	2.73	---	---	---	38	40	4.10
TOTAL	851	---	147.63	649.5	---	79.30	695	---	88.80

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	32	39	3.36	47	37	4.69	84	22	5.11
2	29	42	3.26	44	37	4.43	76	22	4.57
3	27	44	3.24	43	38	4.34	67	22	4.01
4	29	44	3.52	43	38	4.40	60	23	3.68
5	34	40	3.70	43	45	5.27	54	23	3.40
6	38	37	3.80	41	39	4.25	50	24	3.21
7	49	35	4.60	37	39	3.95	47	24	3.07
8	73	30	5.94	35	40	3.85	45	24	2.96
9	92	29	7.15	34	41	3.73	93	22	5.47
10	77	28	5.84	33	41	3.70	155	19	7.80
11	59	28	4.49	34	41	3.70	123	18	5.90
12	49	29	3.83	63	41	6.73	97	19	5.06
13	41	33	3.64	73	28	5.48	77	20	4.14
14	47	29	3.67	61	26	4.37	69	22	4.05
15	43	31	3.60	48	28	3.64	64	22	3.79
16	43	64	7.53	40	31	3.35	59	22	3.53
17	39	37	3.92	37	34	3.37	55	23	3.34
18	36	66	6.53	90	33	7.09	56	26	3.92
19	35	48	4.60	106	21	5.96	90	24	5.88
20	37	56	5.64	89	21	5.01	113	22	6.59
21	35	36	3.41	75	22	4.47	98	29	7.55
22	30	36	2.97	64	23	3.98	88	40	9.61
23	30	113	9.96	60	25	3.97	77	25	5.29
24	91	45	10.1	103	27	7.39	73	26	5.14
25	102	49	13.4	153	22	9.16	71	28	5.28
26	96	36	9.39	132	21	7.45	67	30	5.45
27	74	36	7.25	105	22	6.08	65	30	5.20
28	64	37	6.29	86	22	5.17	62	31	5.20
29	59	37	5.88	---	---	---	58	33	5.11
30	54	37	5.35	---	---	---	54	33	4.83
31	50	37	4.98	---	---	---	52	34	4.86
TOTAL	1594	---	170.84	1819	---	138.98	2299	---	153.00

e Estimated

CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

SODIUM DISSOLVED (MG/L AS NA), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	54	38	5.58	34	35	3.21	52	31	4.37
2	70	33	6.23	48	32	4.14	38	31	3.23
3	64	31	5.36	47	30	3.82	42	33	3.71
4	57	31	4.80	51	29	3.97	32	34	2.88
5	52	32	4.48	65	27	4.71	26	36	2.57
6	49	33	4.28	114	22	6.81	24	37	2.45
7	46	34	4.13	143	19	7.28	25	38	2.62
8	44	34	4.02	128	18	6.28	36	33	3.21
9	47	34	4.26	103	19	5.27	35	30	2.87
10	53	32	4.58	173	19	8.96	29	32	2.57
11	47	33	4.11	204	17	9.30	28	34	2.56
12	43	34	3.94	179	16	7.49	23	37	2.30
13	39	35	3.74	145	17	6.57	149	23	6.67
14	37	36	3.59	118	19	6.04	394	9.8	10.4
15	35	37	3.49	99	21	5.52	396	8.6	9.23
16	33	39	3.44	85	22	5.10	358	13	12.1
17	37	38	3.82	76	24	4.87	243	18	11.5
18	41	36	3.98	69	25	4.63	194	22	11.2
19	38	36	3.71	62	26	4.43	163	25	10.8
20	61	31	5.13	51	28	3.84	141	26	10.1
21	54	31	4.47	46	29	3.57	124	28	9.41
22	46	33	4.11	43	30	3.55	106	30	8.59
23	49	34	4.45	41	31	3.46	96	32	8.29
24	78	30	6.28	37	32	3.24	89	33	7.89
25	69	27	5.11	33	33	2.98	82	34	7.40
26	59	29	4.56	32	34	2.97	75	35	7.00
27	53	31	4.42	30	35	2.85	67	35	6.37
28	48	33	4.19	28	37	2.74	61	35	5.87
29	43	35	4.07	26	38	2.70	59	35	5.64
30	39	36	3.80	23	40	2.50	75	33	6.60
31	---	---	---	26	40	2.76	---	---	---
TOTAL	1485	---	132.13	2359	---	145.56	3262	---	190.40

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	111	29	8.51	42	47	5.32	33	51	4.48
2	110	28	8.35	39	49	5.12	32	51	4.47
3	84	30	6.70	37	50	5.09	32	52	4.41
4	67	33	5.86	37	51	5.06	31	52	4.27
5	58	34	5.35	36	52	5.07	26	51	3.56
6	51	36	4.90	36	52	4.97	25	51	3.51
7	45	37	4.47	39	51	5.26	26	51	3.58
8	46	38	4.77	36	50	4.89	26	51	3.57
9	52	41	5.71	35	50	4.75	25	52	3.49
10	48	42	5.39	34	51	4.72	24	51	3.38
11	43	43	4.99	36	50	4.84	24	52	3.35
12	41	44	4.81	39	48	5.08	24	52	3.36
13	38	45	4.69	37	49	4.84	23	52	3.32
14	37	46	4.65	36	49	4.75	24	52	3.36
15	36	47	4.55	34	50	4.69	26	51	3.52
16	36	47	4.54	34	51	4.62	26	52	3.56
17	34	48	4.48	49	44	5.62	24	52	3.42
18	34	48	4.36	47	42	5.32	24	52	3.37
19	32	48	4.09	43	43	4.99	24	52	3.39
20	33	48	4.27	38	47	4.74	24	53	3.43
21	41	49	5.41	36	49	4.69	23	53	3.34
22	40	50	5.35	35	50	4.63	39	45	4.23
23	49	46	5.91	34	50	4.62	34	39	3.60
24	53	39	5.64	39	48	4.99	27	42	3.07
25	46	42	5.22	35	50	4.76	25	47	3.15
26	42	45	5.08	36	50	4.87	24	49	3.13
27	40	47	5.09	34	50	4.63	24	50	3.23
28	39	48	5.03	34	51	4.64	23	50	3.17
29	40	48	5.10	34	51	4.61	23	51	3.13
30	39	50	5.25	33	51	4.55	23	52	3.14
31	46	47	5.81	33	51	4.52	---	---	---
TOTAL	1511	---	164.33	1147	---	151.25	788	---	105.99
YEAR	18459.5		1668.21						



## CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	e35	120	11.5	29	91	6.20	38	71	7.20
2	e35	120	11.5	39	80	8.45	34	70	6.43
3	e36	120	11.6	28	79	5.87	30	72	5.88
4	e36	120	11.6	23	84	5.16	30	81	6.48
5	e36	120	11.3	21	90	4.96	29	76	5.92
6	e35	120	11.1	19	92	4.78	28	77	5.70
7	e34	120	10.8	19	94	4.71	26	79	5.54
8	e32	120	10.2	21	90	5.21	25	81	5.39
9	e32	120	10.3	32	79	6.62	24	83	5.27
10	e32	120	10.4	30	74	5.98	23	85	5.26
11	e32	120	10.4	15	64	2.57	23	86	5.27
12	e32	120	10.5	11	63	1.92	18	83	3.95
13	e32	120	10.5	10	65	1.79	17	82	3.73
14	e32	120	10.5	11	74	2.20	16	83	3.67
15	e32	120	10.5	11	130	3.89	15	83	3.47
16	e32	120	10.5	11	84	2.40	15	87	3.51
17	e32	120	10.5	9.7	66	1.72	15	88	3.55
18	e32	120	10.5	9.2	66	1.64	15	89	3.52
19	e32	120	10.5	9.6	65	1.70	15	90	3.51
20	e25	120	8.16	20	83	4.59	15	89	3.50
21	e15	120	4.83	21	93	5.33	14	89	3.41
22	e15	120	4.83	34	85	7.61	14	91	3.30
23	e15	120	4.83	32	78	6.68	16	170	7.28
24	e15	120	4.83	28	78	5.97	17	130	6.17
25	e19	120	5.95	26	79	5.63	21	140	7.77
26	e17	120	5.32	26	83	5.86	21	94	5.29
27	e25	110	7.31	28	82	6.28	20	90	4.95
28	e20	110	5.83	26	82	5.82	20	92	4.88
29	e19	110	5.52	25	84	5.66	20	92	5.20
30	e18	110	5.23	25	85	5.84	43	75	8.66
31	17	110	5.01	---	---	---	38	71	7.33
TOTAL	851	---	272.35	649.5	---	143.04	695	---	160.99

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
1	32	70	5.99	47	66	8.35	84	39	8.79
2	29	75	5.84	44	66	7.89	76	38	7.86
3	27	79	5.83	43	67	7.73	67	38	6.89
4	29	80	6.34	43	67	7.83	60	39	6.35
5	34	72	6.61	43	82	9.50	54	40	5.87
6	38	66	6.77	41	69	7.59	50	41	5.55
7	49	62	8.16	37	70	7.06	47	42	5.31
8	73	53	10.4	35	72	6.88	45	42	5.13
9	92	50	12.5	34	73	6.68	93	38	9.39
10	77	49	10.2	33	74	6.63	155	32	13.3
11	59	50	7.84	34	73	6.63	123	30	9.99
12	49	50	6.71	63	74	12.1	97	33	8.62
13	41	59	6.45	73	48	9.56	77	34	7.07
14	47	51	6.42	61	46	7.61	69	37	6.95
15	43	55	6.34	48	49	6.35	64	38	6.52
16	43	120	14.0	40	55	5.88	59	38	6.07
17	39	66	6.99	37	60	5.96	55	39	5.74
18	36	120	12.2	90	58	12.5	56	45	6.81
19	35	88	8.36	106	36	10.2	90	42	10.2
20	37	100	10.3	89	36	8.58	113	37	11.3
21	35	64	6.06	75	38	7.68	98	51	13.3
22	30	64	5.27	64	40	6.86	88	73	17.3
23	30	220	19.5	60	43	6.87	77	44	9.19
24	91	83	18.3	103	47	12.9	73	45	8.93
25	102	90	24.4	153	38	15.8	71	48	9.21
26	96	65	16.7	132	36	12.8	67	53	9.56
27	74	65	12.9	105	37	10.4	65	52	9.11
28	64	65	11.2	86	38	8.89	62	55	9.14
29	59	65	10.5	---	---	---	58	57	9.02
30	54	66	9.51	---	---	---	54	58	8.53
31	50	66	8.87	---	---	---	52	61	8.60
TOTAL	1594	---	307.46	1819	---	243.71	2299	---	265.60

e Estimated

CHARLES RIVER BASIN

01104460 STONY BROOK AT RT. 20 NEAR WALTHAM, MA--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	54	68	9.95	34	62	5.68	52	55	7.69
2	70	58	11.0	48	57	7.30	38	55	5.69
3	64	55	9.42	47	53	6.70	42	58	6.54
4	57	55	8.43	51	50	6.94	32	60	5.08
5	52	56	7.90	65	47	8.20	26	64	4.57
6	49	57	7.56	114	38	11.7	24	66	4.36
7	46	59	7.30	143	32	12.4	25	68	4.67
8	44	61	7.12	128	31	10.7	36	58	5.67
9	47	59	7.52	103	32	8.96	35	53	5.03
10	53	56	8.08	173	32	15.3	29	57	4.52
11	47	57	7.24	204	28	15.7	28	59	4.52
12	43	61	6.97	179	26	12.6	23	66	4.09
13	39	62	6.63	145	28	11.1	149	39	11.3
14	37	65	6.38	118	32	10.3	394	16	17.0
15	35	67	6.20	99	36	9.45	396	14	14.9
16	33	69	6.14	85	38	8.77	358	21	20.1
17	37	68	6.80	76	41	8.41	243	30	19.5
18	41	64	7.08	69	43	8.03	194	37	19.3
19	38	64	6.59	62	46	7.70	163	43	18.7
20	61	55	9.03	51	49	6.70	141	46	17.5
21	54	54	7.85	46	51	6.25	124	49	16.4
22	46	58	7.25	43	53	6.24	106	53	15.1
23	49	60	7.86	41	55	6.08	96	56	14.6
24	78	52	11.0	37	57	5.71	89	58	13.9
25	69	48	8.91	33	59	5.26	82	60	13.1
26	59	50	7.97	32	60	5.25	75	61	12.4
27	53	55	7.77	30	63	5.05	67	63	11.3
28	48	58	7.39	28	65	4.87	61	63	10.4
29	43	62	7.21	26	68	4.81	59	62	10.0
30	39	64	6.74	23	71	4.47	75	58	11.6
31	---	---	---	26	72	4.93	---	---	---
TOTAL	1485	---	233.29	2359	---	251.56	3262	---	329.53

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	LOAD (TONS/DAY)
1	111	50	14.9	42	85	9.61	33	93	8.15
2	110	49	14.6	39	88	9.28	32	93	8.12
3	84	52	11.7	37	91	9.25	32	94	8.02
4	67	57	10.3	37	93	9.20	31	94	7.76
5	58	61	9.47	36	94	9.23	26	93	6.47
6	51	64	8.69	36	94	9.05	25	93	6.37
7	45	66	7.96	39	92	9.56	26	93	6.51
8	46	68	8.51	36	92	8.87	26	93	6.49
9	52	73	10.2	35	91	8.63	25	94	6.36
10	48	75	9.66	34	92	8.57	24	94	6.14
11	43	77	8.96	36	91	8.78	24	95	6.10
12	41	79	8.65	39	88	9.20	24	95	6.12
13	38	82	8.46	37	88	8.76	23	96	6.05
14	37	83	8.39	36	90	8.62	24	94	6.11
15	36	84	8.22	34	92	8.52	26	92	6.39
16	36	86	8.22	34	92	8.39	26	94	6.47
17	34	87	8.11	49	80	10.1	24	94	6.22
18	34	87	7.90	47	75	9.53	24	94	6.13
19	32	86	7.40	43	78	8.96	24	95	6.17
20	33	86	7.73	38	84	8.56	24	96	6.25
21	41	89	9.80	36	88	8.49	23	96	6.09
22	40	90	9.70	35	90	8.40	39	81	7.59
23	49	83	10.7	34	91	8.38	34	70	6.43
24	53	70	10.1	39	87	9.02	27	76	5.50
25	46	76	9.37	35	90	8.64	25	84	5.68
26	42	81	9.15	36	91	8.84	24	89	5.67
27	40	85	9.20	34	92	8.41	24	90	5.87
28	39	87	9.10	34	92	8.43	23	91	5.76
29	40	86	9.23	34	92	8.37	23	93	5.70
30	39	91	9.54	33	92	8.27	23	94	5.72
31	46	85	10.5	33	92	8.20	---	---	---
TOTAL	1511	---	294.42	1147	---	274.12	788	---	192.41
YEAR	18459.5	---	2968.48		---			---	

## CHARLES RIVER BASIN

01104475 STONY BROOK RESERVOIR, UNNAMED TRIBUTARY 1 NEAR WESTON, MA

LOCATION.--Lat 42°21'16", Long 71°16'07", Middlesex County, Hydrologic Unit 01090001, at bridge on Summer Street, 500 ft upstream from Stony Brook Reservoir, and 1.9 mi southeast of Weston.

DRAINAGE AREA.--0.85 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1997 to September 1998.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV										
06...	1145	0.09	243	7.3	--	8.4	771	10.4	88	--
20...	1145	.14	232	7.1	8.0	4.5	760	14.6	113	--
DEC										
17...	1330	.29	239	7.5	--	4.5	753	12.1	95	18
JAN										
15...	1000	1.4	208	7.3	--	2.5	773	13.6	99	15
MAR										
26...	1045	2.5	177	6.9	9.9	6.4	769	12.1	97	12
MAY										
14...	1040	4.6	144	6.3	14.4	11.3	765	10.6	96	10
JUL										
09...	1045	1.1	159	7.1	21.3	17.7	755	8.5	90	12
AUG										
24...	0900	.46	169	6.7	--	19.2	754	8.1	89	12
SEP										
17...	1300	.10	185	7.1	18.4	15.3	760	9.1	91	13

DATE	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)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
NOV										
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	16	--	--	--	--	<0.010
DEC										
17...	3.5	21	2.3	--	24	33	<0.10	8.2	152	<.010
JAN										
15...	3.1	20	1.6	26	20	33	<.10	9.6	131	<.010
MAR										
26...	2.3	17	1.3	--	17	28	<.10	8.3	112	<.010
MAY										
14...	1.9	14	1.3	--	15	21	<.10	8.5	94	<.010
JUL										
09...	2.3	16	1.7	--	14	22	<.10	9.0	106	.010
AUG										
24...	2.1	17	2.0	--	13	22	<.10	6.1	111	<.010
SEP										
17...	2.2	19	1.4	--	15	24	<.10	8.4	110	<.010

CHARLES RIVER BASIN

01104475 STONY BROOK RESERVOIR, UNNAMED TRIBUTARY 1 NEAR WESTON, MA

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
NOV										
06...	--	--	--	--	--	--	--	--	--	--
20...	0.904	<0.020	0.30	0.21	0.022	<0.010	0.016	26	5.3	4.2
DEC										
17...	1.57	<.020	.24	.22	<.010	<.010	<.010	28	4.8	--
JAN										
15...	1.51	<.020	.27	.20	.016	<.010	<.010	75	17	--
MAR										
26...	1.06	.034	.29	.14	.013	<.010	.001	45	11	--
MAY										
14...	.725	.029	.30	.28	.011	<.010	<.001	93	22	--
JUL										
09...	.634	.040	.37	.20	.074	.015	.004	130	8.3	--
AUG										
24...	.612	<.020	.23	.27	<.010	<.010	.006	80	4.8	--
SEP										
17...	.991	<.020	.20	<.10	.027	<.010	.009	12	<4.0	--

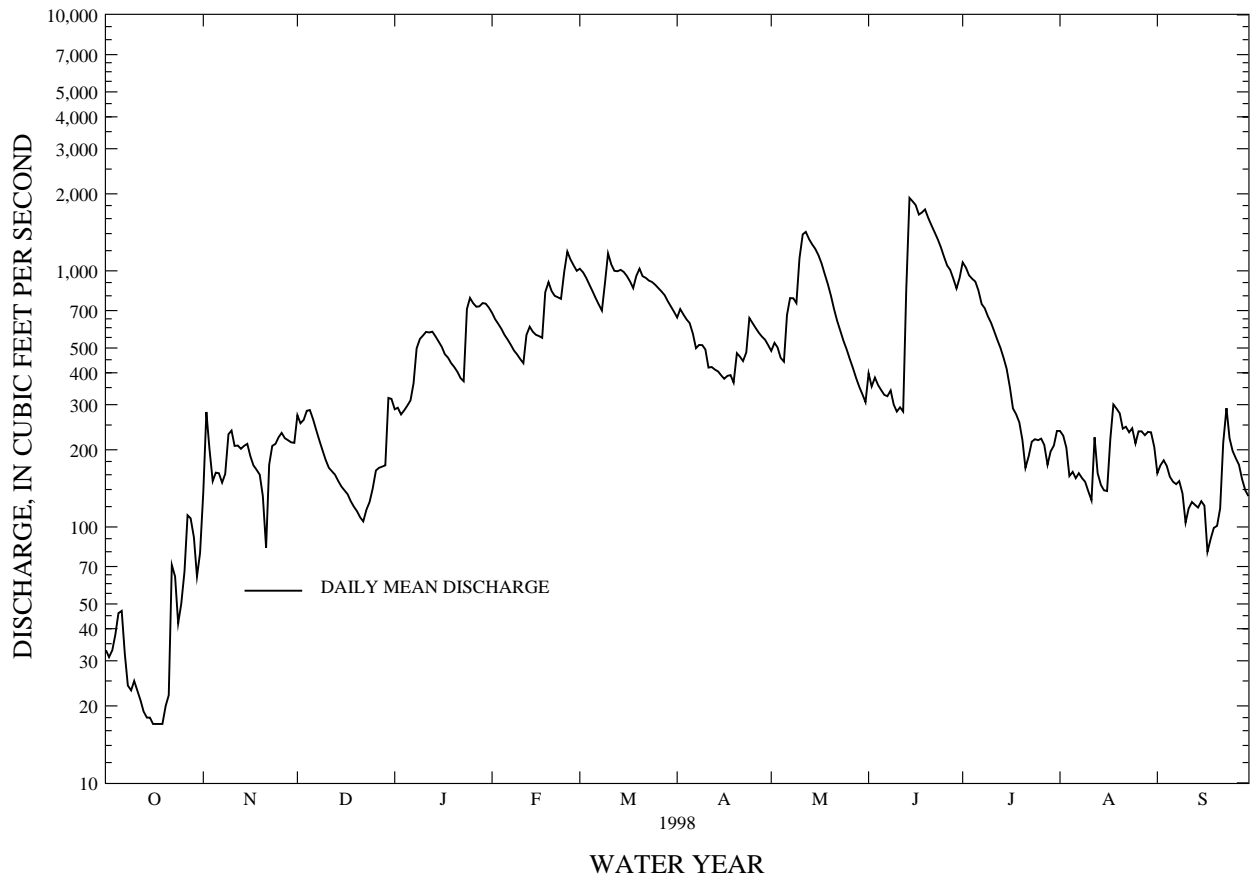


CHARLES RIVER BASIN

01104500 CHARLES RIVER AT WALTHAM, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1931 - 1998	
ANNUAL TOTAL	95872		168997			
ANNUAL MEAN	263		463		310	
HIGHEST ANNUAL MEAN					558 1984	
LOWEST ANNUAL MEAN					129 1966	
HIGHEST DAILY MEAN	1020	Apr 8	1930	Jun 14	2940	Jan 26 1979
LOWEST DAILY MEAN	17	Oct 16	17	Oct 16	.20	Oct 4 1943
ANNUAL SEVEN-DAY MINIMUM	18	Oct 13	18	Oct 13	1.6	Sep 30 1943
INSTANTANEOUS PEAK FLOW			2180	Jun 14	4150	Feb 3 1976
INSTANTANEOUS PEAK STAGE			5.51	Jun 14	6.54	Feb 3 1976
INSTANTANEOUS LOW FLOW			17	Oct 16	.10	Oct 1 1943
10 PERCENT EXCEEDS	602		992		680	
50 PERCENT EXCEEDS	194		341		220	
90 PERCENT EXCEEDS	25		107		44	

CHARLES RIVER AT WALTHAM, MA 01104500





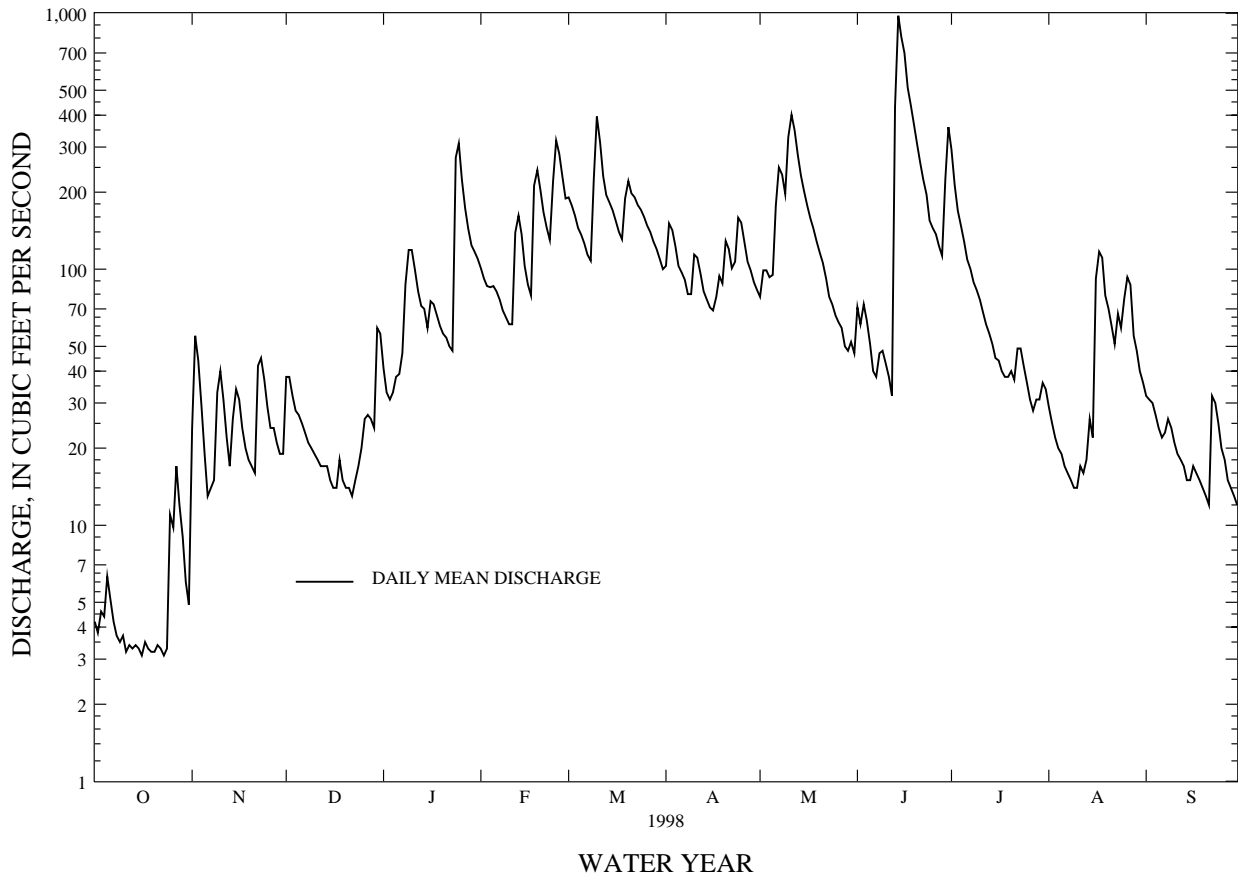
NEPONSET RIVER BASIN

01105000 NEPONSET RIVER AT NORWOOD, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1940 - 1998	
ANNUAL TOTAL	18038.8	32986.2		
ANNUAL MEAN	49.4	90.4	56.0	
HIGHEST ANNUAL MEAN			106	1984
LOWEST ANNUAL MEAN			21.7	1966
HIGHEST DAILY MEAN	262 Apr 6	978 Jun 14	1260	Aug 20 1955
LOWEST DAILY MEAN	2.5 Aug 15	3.1 Oct 16	1.4	Oct 20 1963
ANNUAL SEVEN-DAY MINIMUM	2.9 Aug 1	3.3 Oct 18	2.9	Jul 18 1995
INSTANTANEOUS PEAK FLOW		1100 Jun 14	1490	Aug 19 1955
INSTANTANEOUS PEAK STAGE		10.89 Jun 14	14.65	Aug 19 1955
INSTANTANEOUS LOW FLOW		2.7 Oct 15		
10 PERCENT EXCEEDS	121	203	125	
50 PERCENT EXCEEDS	25	56	37	
90 PERCENT EXCEEDS	3.5	14	8.9	

e Estimated

NEPONSET RIVER AT NORWOOD, MA 01105000





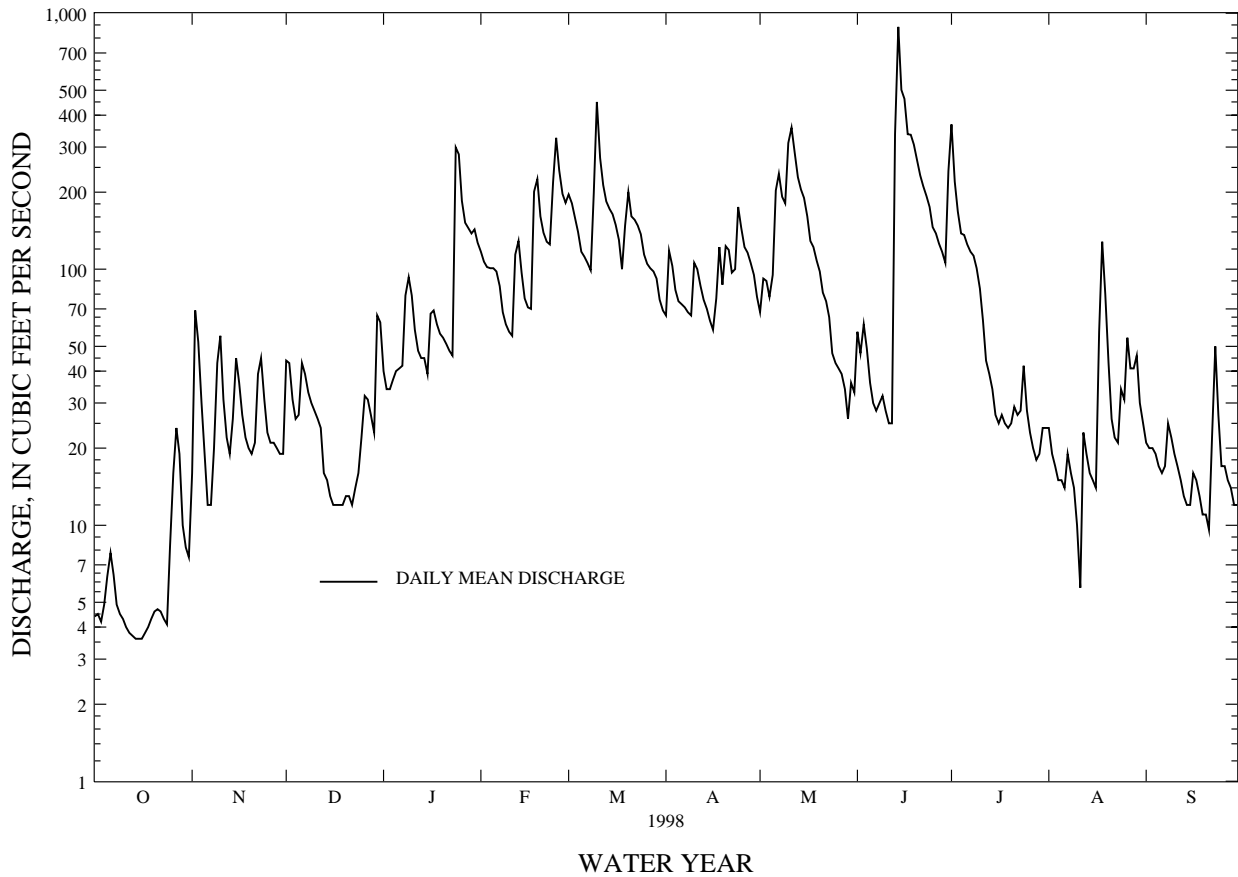


NEPONSET RIVER BASIN

01105500 EAST BRANCH NEPONSET RIVER AT CANTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1953 - 1998	
ANNUAL TOTAL	16224.2		28965.2			
ANNUAL MEAN	44.4		79.4		51.6	
HIGHEST ANNUAL MEAN					79.4 1998	
LOWEST ANNUAL MEAN					18.6 1966	
HIGHEST DAILY MEAN	235	Apr 19	885	Jun 14	1360	Aug 19 1955
LOWEST DAILY MEAN	3.3	Sep 25	3.6	Oct 14	.60	Jul 7 1957
ANNUAL SEVEN-DAY MINIMUM	3.4	Sep 23	3.7	Oct 11	2.5	Sep 7 1993
INSTANTANEOUS PEAK FLOW			1060	Jun 13	1790	Aug 19 1955
INSTANTANEOUS PEAK STAGE			5.78	Jun 13	8.18	Aug 19 1955
INSTANTANEOUS LOW FLOW			3.5	Oct 13		
10 PERCENT EXCEEDS	111		191		111	
50 PERCENT EXCEEDS	27		44		37	
90 PERCENT EXCEEDS	4.5		12		8.0	

EAST BRANCH NEPONSET RIVER AT CANTON, MA 01105500



## NEPONSET RIVER BASIN

011055566 NEPONSET RIVER AT MILTON VILLAGE, MA

LOCATION.--Lat 42°16'15", long 71°04'08", Norfolk County, Hydrologic Unit 01090001, 100 ft upstream from bridge on Adams Street, at Milton Village.

DRAINAGE AREA.--101 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1996 to current year.

GAGE.--Water stage recorder. Elevation of gage is 20 ft below sea level, from topographic map.

REMARKS.--Records good except those below 40 ft<sup>3</sup>/s, which are fair, and those for estimated daily discharges, which are poor. Record on most days is adjusted for tidal backwater, which lasts as much as 4 hours during times of high tide. Flow regulated by mills and reservoirs upstream. Flow affected by diversion from Charles River basin to Neponset River basin by Mother Brook (station 01104000) through Dedham and Hyde Park and by diversions to and from basin for municipal supplies. Telephone and satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--1 year (water year 1998), 426 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft<sup>3</sup>/s, June 18, 1998, gage height, 36.93 ft; minimum, 4.8 ft<sup>3</sup>/s, Oct. 24, 1997, minimum daily, 10 ft<sup>3</sup>/s, Oct. 23, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,720 ft<sup>3</sup>/s, June 18, gage height, 36.93 ft; minimum, 4.8 ft<sup>3</sup>/s, Oct. 24, minimum daily, 10 ft<sup>3</sup>/s, Oct. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	86	167	218	e637	1040	471	427	216	1180	141	122
2	11	189	188	167	578	969	517	455	215	1140	113	99
3	13	151	160	166	540	935	502	439	252	1100	84	105
4	17	138	153	167	501	864	490	420	217	1040	93	83
5	22	94	131	165	531	804	462	505	194	988	81	81
6	19	76	130	178	674	722	419	711	158	884	85	74
7	20	49	123	216	e450	666	460	919	142	886	71	75
8	14	89	114	372	369	613	429	e1100	151	774	78	94
9	16	179	92	459	310	815	414	e1200	140	713	68	77
10	12	170	92	486	286	1050	483	1360	138	638	58	75
11	27	161	74	475	255	1090	526	1520	123	560	76	63
12	27	110	79	426	401	1100	509	1580	99	473	128	64
13	23	91	73	390	477	1080	456	1510	816	360	85	59
14	16	109	65	349	481	1070	437	1460	1660	288	79	56
15	16	160	51	313	455	1040	392	1380	e1970	219	90	49
16	11	148	53	336	414	968	371	1290	2240	189	87	60
17	13	115	42	339	377	887	372	1190	2330	170	220	49
18	14	99	51	315	e738	777	436	1060	2420	167	399	56
19	13	84	44	284	e820	841	424	955	2510	146	403	55
20	11	65	49	245	e700	861	507	819	2280	127	365	52
21	14	77	49	e235	e600	868	515	726	2040	155	285	45
22	11	174	38	e215	e520	881	478	625	e1810	147	223	110
23	10	216	50	e200	e450	869	542	545	1560	166	171	137
24	11	186	58	e700	e1130	832	693	458	e1450	228	207	109
25	30	176	76	e1000	1110	812	685	367	e1270	188	193	75
26	44	137	102	e920	1090	761	654	289	1200	155	196	68
27	63	137	109	e860	1070	726	610	246	1080	119	221	63
28	58	109	104	e820	1030	679	575	202	932	115	198	46
29	33	99	90	e760	---	631	530	183	774	140	202	50
30	29	94	223	e720	---	566	479	173	997	134	175	42
31	18	---	236	e680	---	515	---	157	---	151	130	---
TOTAL	648	3768	3066	13176	16994	26332	14838	24271	31384	13740	5005	2193
MEAN	20.9	126	98.9	425	607	849	495	783	1046	443	161	73.1
MAX	63	216	236	1000	1130	1100	693	1580	2510	1180	403	137
MIN	10	49	38	165	255	515	371	157	99	115	58	42

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

	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
MEAN	20.9	200	480	423	509	675	749	551	566	236	93.8	46.2
MAX	20.9	274	860	425	607	849	1002	783	1046	443	161	73.1
(WY)	1998	1997	1998	1998	1998	1998	1997	1998	1998	1998	1998	1998
MIN	20.9	126	98.9	420	410	501	495	318	86.1	29.2	26.2	19.3
(WY)	1998	1998	1998	1997	1997	1997	1998	1997	1997	1997	1997	1997

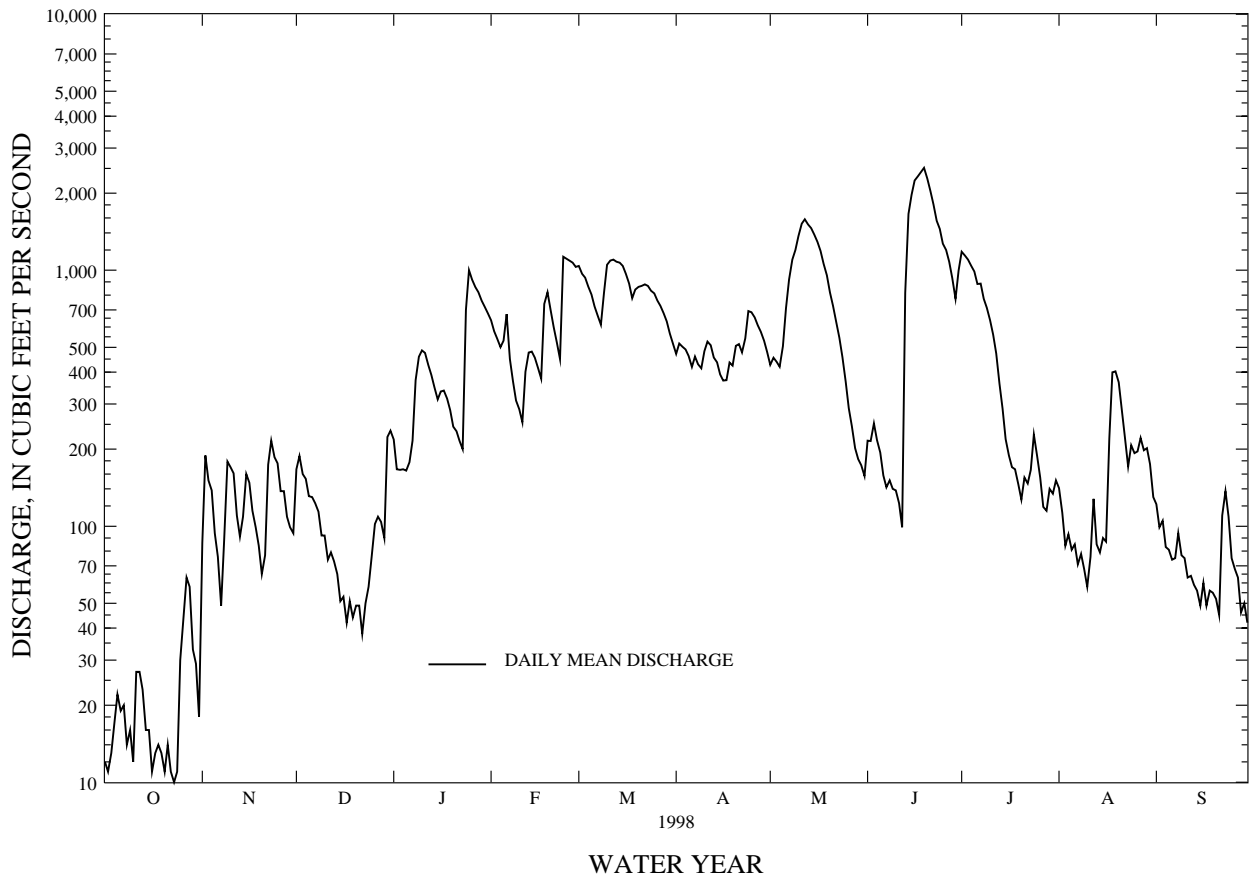
NEPONSET RIVER BASIN

011055566 NEPONSET RIVER AT MILTON VILLAGE, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1997 - 1998	
ANNUAL TOTAL	92336		155415			
ANNUAL MEAN	253		426		426	
HIGHEST ANNUAL MEAN					426	
LOWEST ANNUAL MEAN					426	
HIGHEST DAILY MEAN	1340		2510		2510	
LOWEST DAILY MEAN	10		10		10	
ANNUAL SEVEN-DAY MINIMUM	12		12		12	
INSTANTANEOUS PEAK FLOW			2720		2720	
INSTANTANEOUS PEAK STAGE			36.93		36.93	
INSTANTANEOUS LOW FLOW			4.8		4.8	
10 PERCENT EXCEEDS	624		1050		1000	
50 PERCENT EXCEEDS	114		218		276	
90 PERCENT EXCEEDS	17		49		24	

e Estimated

NEPONSET RIVER AT MILTON VILLAGE, MA 011055566





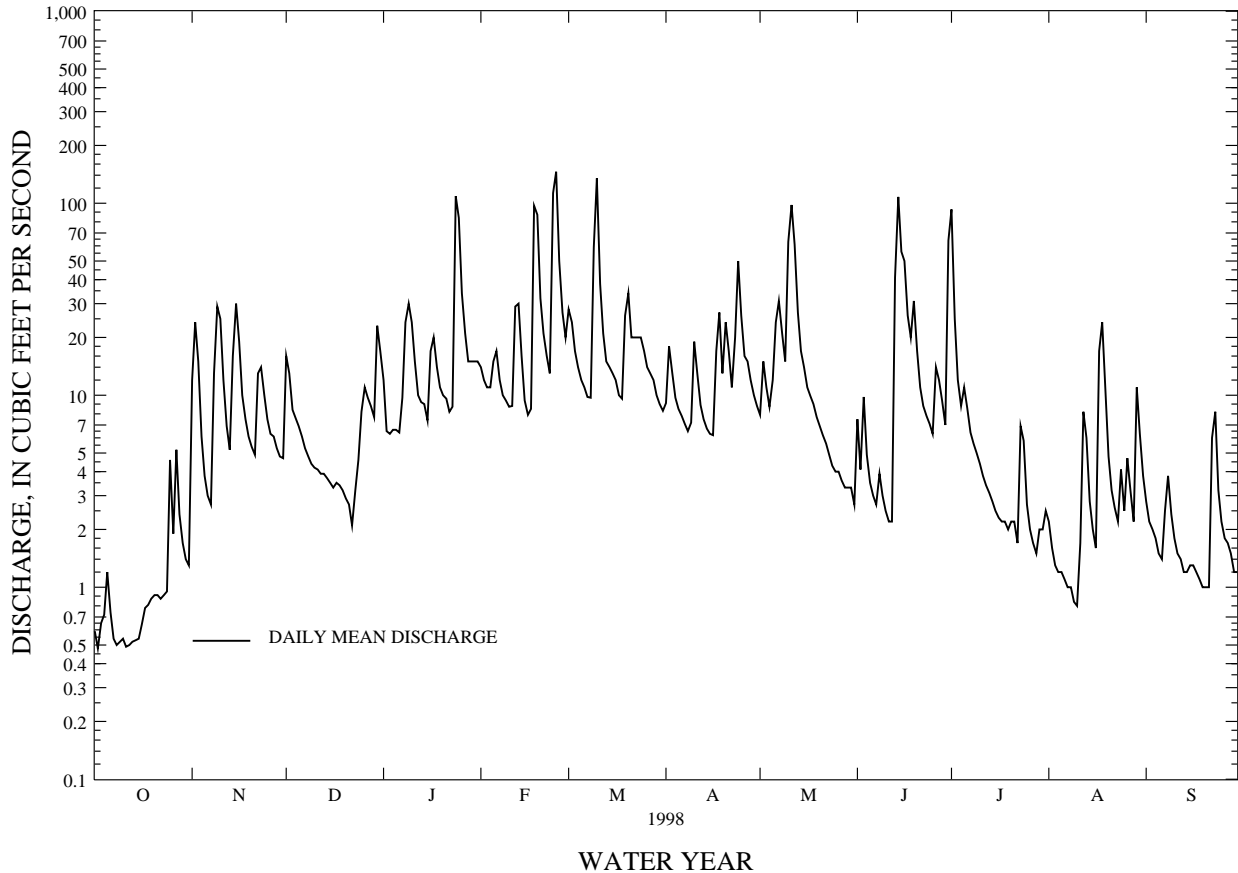
WEYMOUTH BACK RIVER BASIN

01105600 OLD SWAMP RIVER NEAR SOUTH WEYMOUTH, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1966 - 1998	
ANNUAL TOTAL	2300.70	4609.05	9.22	
ANNUAL MEAN	6.30	12.6	14.4	1984
HIGHEST ANNUAL MEAN			3.91	1985
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	59 Apr 19	146 Feb 25	361	Mar 18 1968
LOWEST DAILY MEAN	.33 Jul 21	.48 Oct 2	.05	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	.36 Jul 29	.51 Oct 8	.06	Sep 6 1995
INSTANTANEOUS PEAK FLOW		224 Feb 24	590	May 31 1984
INSTANTANEOUS PEAK STAGE		4.92 Feb 24	5.35	Feb 15 1971
INSTANTANEOUS LOW FLOW		.42 Oct 2	.05	Sep 10 1995
ANNUAL RUNOFF (CFSM)	1.40	2.81	2.05	
ANNUAL RUNOFF (INCHES)	19.02	38.10	27.85	
10 PERCENT EXCEEDS	16	26	19	
50 PERCENT EXCEEDS	3.9	7.5	5.4	
90 PERCENT EXCEEDS	.53	1.2	.82	

e Estimated

OLD SWAMP RIVER NEAR SOUTH WEYMOUTH, MA 01105600



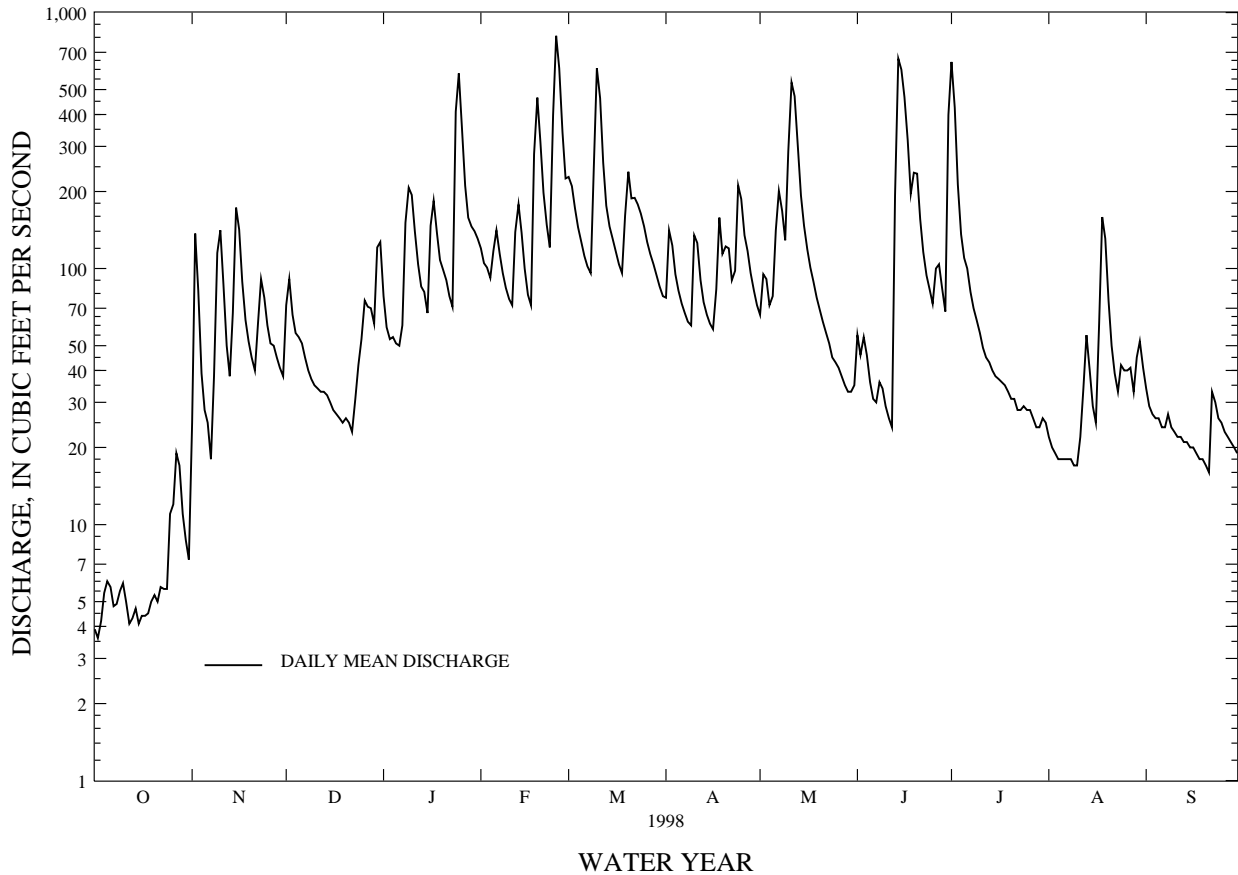


NORTH RIVER BASIN

01105730 INDIAN HEAD RIVER AT HANOVER, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1966 - 1998	
ANNUAL TOTAL	20332.5		35514.6			
ANNUAL MEAN	55.7		97.3		63.3	
HIGHEST ANNUAL MEAN					97.3 1998	
LOWEST ANNUAL MEAN					27.6 1981	
HIGHEST DAILY MEAN	389	Apr 5	811	Feb 25	1260	Mar 19 1968
LOWEST DAILY MEAN	3.6	Aug 1	3.6	Oct 2	.18	Sep 27 1980
ANNUAL SEVEN-DAY MINIMUM	4.4	Oct 12	4.4	Oct 12	.38	Sep 26 1980
INSTANTANEOUS PEAK FLOW			849	Feb 25	1390	Mar 18 1968
INSTANTANEOUS PEAK STAGE			5.84	Feb 25	7.13	Mar 18 1968
INSTANTANEOUS LOW FLOW			3.0	Oct 3	.14	Sep 26 1980
ANNUAL RUNOFF (CFSM)	1.84		3.21		2.09	
ANNUAL RUNOFF (INCHES)	24.96		43.60		28.38	
10 PERCENT EXCEEDS	125		199		140	
50 PERCENT EXCEEDS	43		61		41	
90 PERCENT EXCEEDS	4.9		18		7.1	

INDIAN HEAD RIVER AT HANOVER, MA 01105730





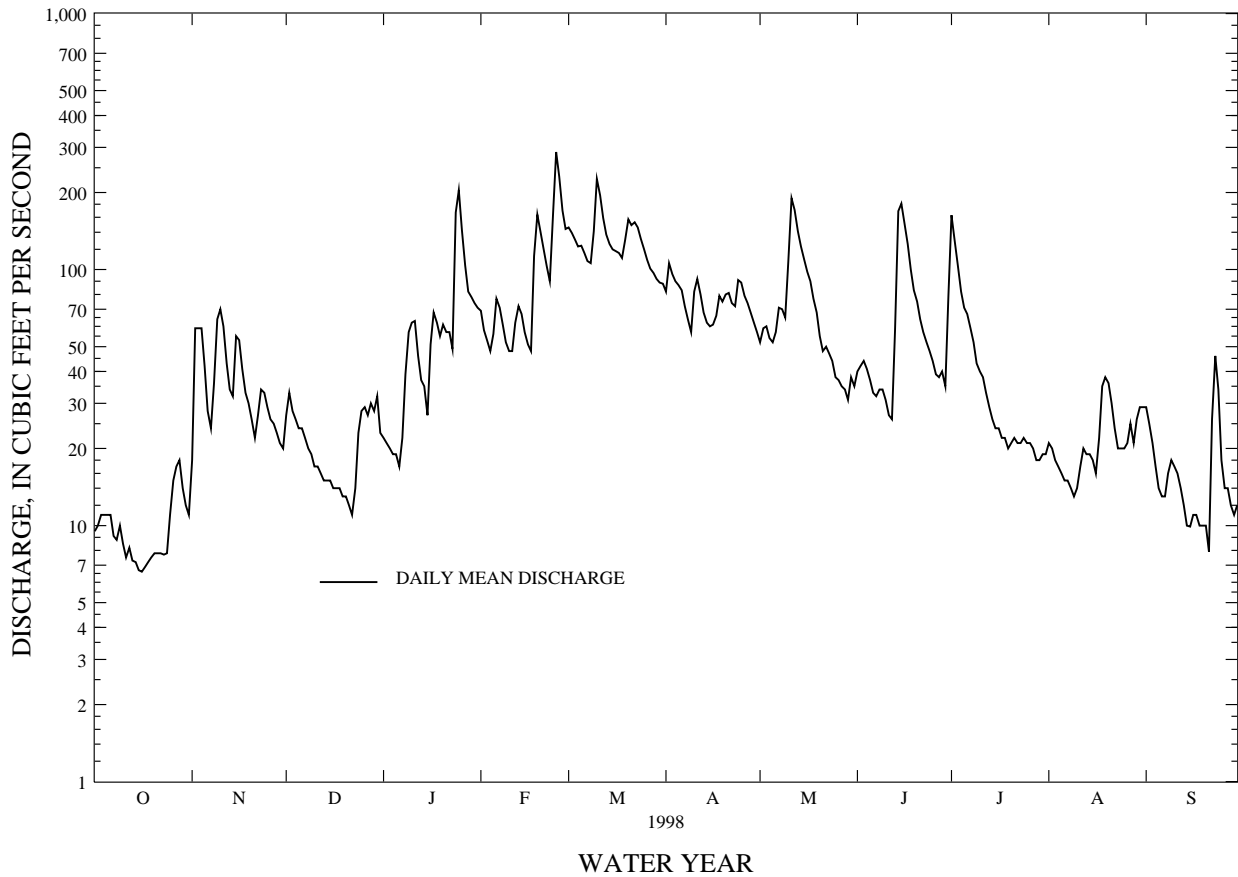


JONES RIVER BASIN

01105870 JONES RIVER AT KINGSTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1966 - 1998	
ANNUAL TOTAL	13380.0		19501.7			
ANNUAL MEAN	36.7		53.4		32.7	
HIGHEST ANNUAL MEAN					54.6	1984
LOWEST ANNUAL MEAN					14.9	1981
HIGHEST DAILY MEAN	184	Apr 3	288	Feb 25	527	Mar 19 1968
LOWEST DAILY MEAN	6.6	Oct 16	6.6	Oct 16	.59	Aug 11 1966
ANNUAL SEVEN-DAY MINIMUM	7.1	Oct 13	7.1	Oct 13	1.1	Aug 6 1966
INSTANTANEOUS PEAK FLOW			298	Feb 25	575	Mar 19 1968
INSTANTANEOUS PEAK STAGE			5.00	Feb 25	5.88	Feb 7 1978
INSTANTANEOUS LOW FLOW			4.6	Oct 16		
10 PERCENT EXCEEDS	67		123		64	
50 PERCENT EXCEEDS	28		37		24	
90 PERCENT EXCEEDS	13		12		9.0	

JONES RIVER AT KINGSTON, MA 01105870



## QUASHNET RIVER BASIN

011058837 QUASHNET RIVER AT WAQUOIT VILLAGE, MA

LOCATION.--Lat 41°35'32", long 70°30'30", Barnstable County, Hydrologic Unit 01090002, on right bank 15 ft upstream from bridge on Martins Road, 0.5 mi northeast of Waquoit Village, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--Surface drainage, from topography, about 2.58 mi<sup>2</sup>, excludes area drained by Johns Pond. This stream drains from a ground-water basin which is larger than, and not coincident with, the surface-water basin.

PERIOD OF RECORD.--October 1988 to current year.

REVISED RECORDS.--WDR MA-RI-92-1: 1990 (M), 1991.

GAGE.--Water-stage recorder. Elevation of gage is 0.86 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow at times includes overflow and leakage from Johns Pond. Occasional regulation by cranberry bog upstream. Occasional backwater from tidal surge.

AVERAGE DISCHARGE.--10 years, 16.0 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42 ft<sup>3</sup>/s, July 1, 1998, gage height, 3.09 ft; maximum gage height, 4.55 ft, Aug. 19, 1991 (tidal surge); minimum discharge, 5.7 ft<sup>3</sup>/s, Oct. 24, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42 ft<sup>3</sup>/s, July 1, gage height, 3.09 ft; maximum gage height, 3.11 ft, Nov. 1, (tidal surge); minimum discharge, 8.5 ft<sup>3</sup>/s, Dec. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	27	19	13	19	27	29	27	24	41	17	17
2	18	31	17	13	19	33	37	29	24	38	17	17
3	18	23	17	13	24	35	33	28	24	24	16	17
4	18	19	16	13	23	30	31	28	23	21	16	16
5	18	18	16	14	25	28	30	29	22	22	16	19
6	18	18	17	20	21	26	30	29	22	21	16	19
7	18	18	16	19	19	26	29	29	22	21	16	19
8	17	20	16	19	20	26	29	28	22	20	16	22
9	17	24	16	18	20	31	29	28	22	20	16	19
10	17	21	16	17	20	32	35	30	22	20	16	17
11	17	19	12	15	20	27	32	30	22	20	17	17
12	16	18	10	15	24	25	31	29	21	19	17	16
13	15	17	9.9	15	23	24	30	28	26	20	17	16
14	16	19	9.6	15	21	25	29	28	39	19	17	15
15	15	21	9.5	15	21	25	29	27	32	19	17	15
16	15	19	9.5	19	21	25	29	27	31	19	16	16
17	15	18	9.1	18	25	25	30	27	28	19	17	16
18	15	17	8.8	17	29	25	30	27	26	19	20	16
19	15	17	8.8	17	27	29	29	26	26	19	24	16
20	e15	17	8.8	17	25	32	30	25	26	18	19	15
21	15	17	8.6	16	23	31	29	24	26	18	18	15
22	12	20	9.1	16	23	33	29	24	26	17	18	20
23	10	19	16	16	22	31	30	23	29	18	18	22
24	9.9	18	16	24	e28	30	30	23	29	19	18	17
25	12	17	14	19	36	30	29	23	18	17	17	17
26	16	17	14	15	31	29	29	23	17	17	20	17
27	e16	17	13	16	27	28	29	23	16	17	19	17
28	18	17	15	18	26	27	28	23	16	17	18	17
29	18	16	14	e21	---	28	28	22	18	17	20	16
30	16	16	e14	20	---	28	27	22	30	---	16	16
31	21	---	14	19	---	28	---	22	---	18	18	---
TOTAL	494.9	575	409.7	522	662	879	899	811	729	630	546	514
MEAN	16.0	19.2	13.2	16.8	23.6	28.4	30.0	26.2	24.3	20.3	17.6	17.1
MAX	21	31	19	24	36	35	37	30	39	41	24	22
MIN	9.9	16	8.6	13	19	24	27	22	16	16	16	15

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

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		
MEAN	13.5	15.1	13.4	14.4	14.9	17.1	20.9	20.0	17.8	15.5	15.0	14.7
MAX	23.9	22.9	20.3	18.5	23.6	28.4	30.0	27.4	24.3	21.0	21.1	20.7
(WY)	1997	1997	1997	1993	1998	1998	1998	1998	1998	1997	1997	1996
MIN	10.2	12.3	9.56	11.1	10.2	11.4	12.9	11.7	12.2	11.9	12.2	10.7
(WY)	1996	1994	1996	1991	1995	1989	1992	1995	1995	1991	1995	1995

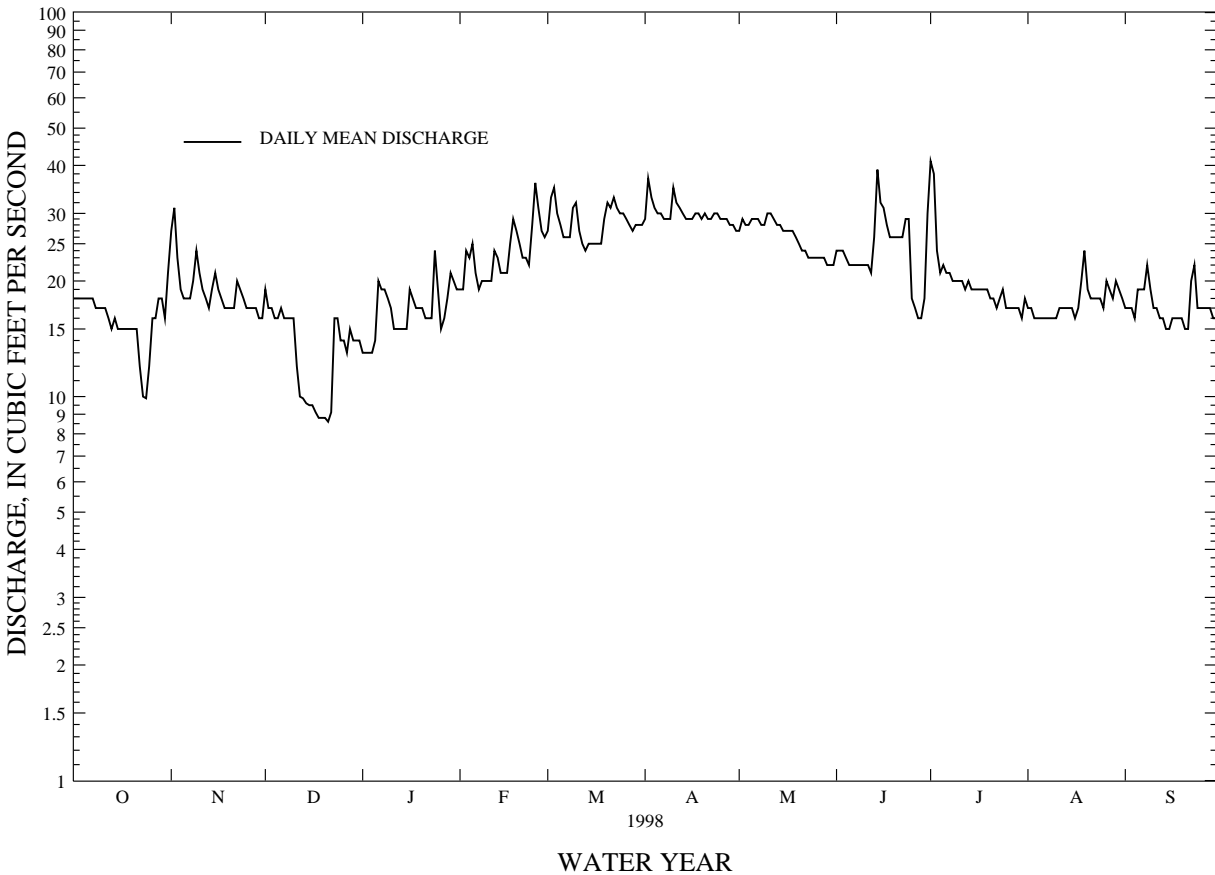
QUASHNET RIVER BASIN

011058837 QUASHNET RIVER AT WAQUOIT VILLAGE, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1989 - 1998	
ANNUAL TOTAL	7363.6		7671.6			
ANNUAL MEAN	20.2		21.0		16.0	
HIGHEST ANNUAL MEAN					21.8 1997	
LOWEST ANNUAL MEAN					12.4 1995	
HIGHEST DAILY MEAN			41 Jul 1		41 Jul 1 1998	
LOWEST DAILY MEAN	8.6	Dec 21	8.6	Dec 21	5.9 Oct 24 1995	
ANNUAL SEVEN-DAY MINIMUM	9.0	Dec 16	9.0	Dec 16	7.2 Oct 18 1995	
INSTANTANEOUS PEAK FLOW			42 Jul 1		41 Aug 9 1992	
INSTANTANEOUS PEAK STAGE			3.11 Nov 1		4.55 Aug 19 1991	
INSTANTANEOUS LOW FLOW			8.5 Dec 21			
10 PERCENT EXCEEDS	28		29		24	
50 PERCENT EXCEEDS	19		19		15	
90 PERCENT EXCEEDS	16		15		11	

e Estimated

QUASHNET RIVER AT WAQUOIT VILLAGE, MA 011058837



## SLOCUMS RIVER BASIN

01105933 PASKAMANSET RIVER NEAR SOUTH DARTMOUTH, MA

LOCATION.--Lat 41°35'07", long 70°59'27", Bristol County, Hydrologic Unit 01090002, at bridge on Russells Mills Road, 3.0 mi west of South Dartmouth.

DRAINAGE AREA.--26.2 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge measurements made in water years 1972-74, 1991-92. October 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10 ft above sea level, from topographic map. Telephone gage-height telemeter at station.

REMARKS.--Records good.

AVERAGE DISCHARGE.--3 years, 60.0 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 499 ft<sup>3</sup>/s, June 16, gage height, 13.16 ft; minimum, 0.70 ft<sup>3</sup>/s, Oct. 11, 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	9.0	38	63	115	201	50	54	33	175	12	15
2	2.3	58	45	56	95	179	153	69	31	199	8.7	12
3	2.0	80	40	49	80	151	207	86	32	162	6.5	9.7
4	2.6	76	36	45	71	130	176	82	28	125	5.2	8.2
5	2.6	67	34	41	73	110	143	70	24	92	4.5	7.0
6	2.6	52	36	39	92	94	116	80	20	68	3.9	6.0
7	2.3	41	33	43	95	81	92	138	18	48	3.5	5.9
8	1.8	40	31	65	85	72	74	159	18	39	3.1	18
9	1.6	58	28	96	73	101	64	151	18	36	2.7	16
10	1.4	80	27	121	64	232	91	166	16	32	2.6	12
11	.91	82	37	111	58	252	131	239	15	29	14	7.6
12	.95	72	36	93	71	208	128	238	14	26	16	5.7
13	1.0	60	33	80	104	165	107	203	40	24	11	5.0
14	1.0	53	30	74	104	138	87	169	215	22	7.1	4.3
15	.97	63	26	67	88	112	72	139	425	20	5.2	4.4
16	1.3	70	25	86	72	91	61	107	483	19	4.1	4.2
17	2.1	66	24	131	61	77	57	79	450	18	15	4.2
18	1.9	59	23	126	124	67	80	65	362	17	36	3.7
19	1.9	51	22	107	291	84	85	54	267	16	36	3.1
20	2.0	44	22	88	289	169	79	46	186	15	29	2.9
21	2.0	38	21	76	240	175	76	41	146	15	22	2.8
22	1.8	43	19	67	192	167	70	38	113	13	18	20
23	1.7	50	32	61	153	162	66	35	81	12	12	20
24	1.7	50	59	142	182	144	99	32	64	13	9.6	14
25	4.3	46	63	355	340	120	116	30	52	10	8.8	9.0
26	11	40	76	375	339	98	108	30	44	8.7	14	7.3
27	20	39	72	315	280	83	100	28	73	7.6	17	6.7
28	18	35	65	249	225	73	90	26	73	6.9	14	6.1
29	12	33	59	199	---	64	77	24	52	6.8	21	5.0
30	8.4	30	61	163	---	56	64	24	67	9.0	21	4.2
31	5.7	---	67	139	---	51	---	22	---	11	17	---
TOTAL	123.03	1585.0	1220	3722	4056	3907	2919	2724	3460	1295.0	400.5	250.0
MEAN	3.97	52.8	39.4	120	145	126	97.3	87.9	115	41.8	12.9	8.33
MAX	20	82	76	375	340	252	207	239	483	199	36	20
MIN	.91	9.0	19	39	58	51	50	22	14	6.8	2.6	2.8
CFSM	.15	2.02	1.50	4.58	5.53	4.81	3.71	3.35	4.40	1.59	.49	.32
IN.	.17	2.25	1.73	5.28	5.76	5.55	4.14	3.87	4.91	1.84	.57	.35

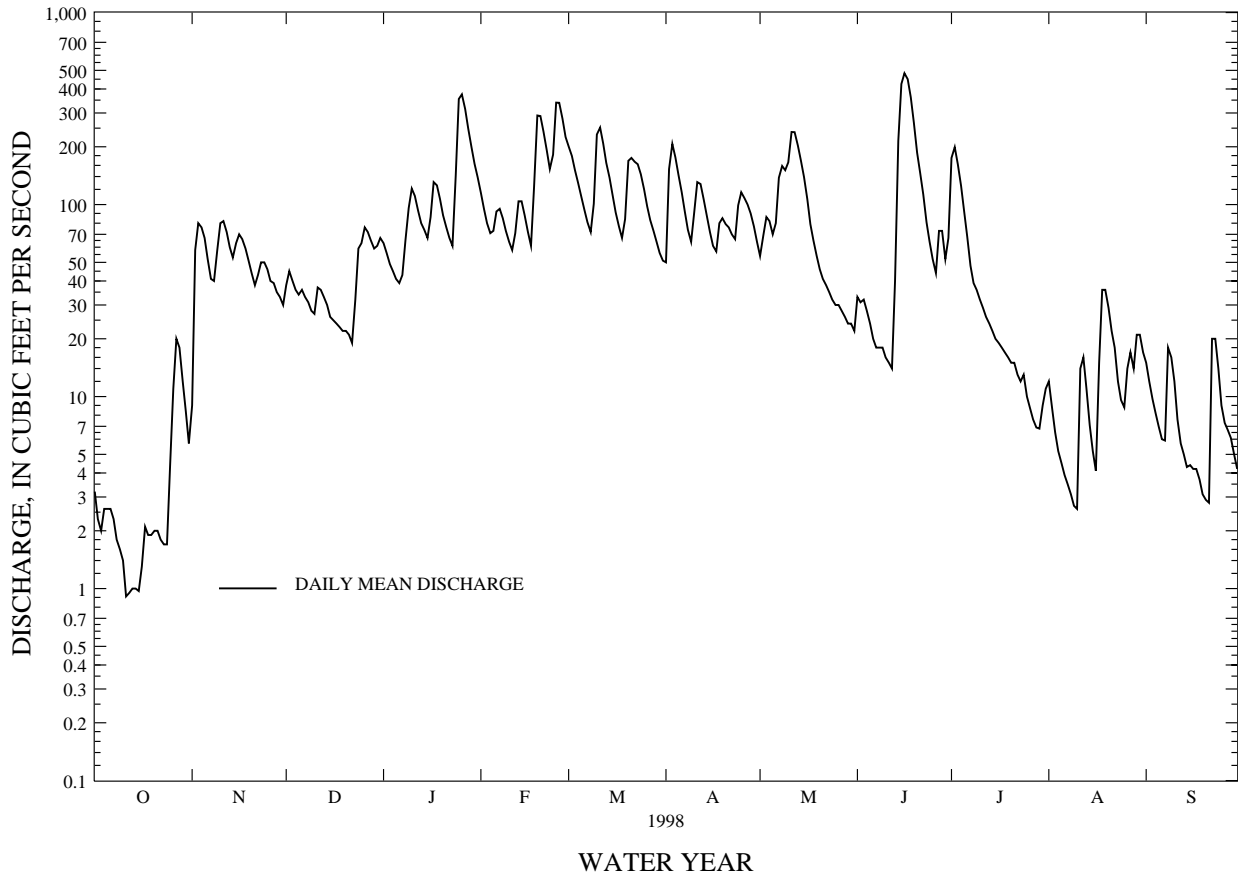
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1998, BY WATER YEAR (WY)

	1995	1996	1997	1998
MEAN	41.9	55.0	74.6	89.4
MAX	105	69.2	150	120
(WY)	1997	1996	1997	1998
MIN	3.97	43.0	34.5	58.0
(WY)	1998	1997	1996	1997

01105933 PASKAMANSET RIVER NEAR SOUTH DARTMOUTH, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1995 - 1998	
ANNUAL TOTAL	15063.69		25661.53		60.0	
ANNUAL MEAN	41.3		70.3		70.3	
HIGHEST ANNUAL MEAN					51.3	
LOWEST ANNUAL MEAN					1996	
HIGHEST DAILY MEAN	456	Apr 2	483	Jun 16	501	Dec 9 1996
LOWEST DAILY MEAN	.78	Jul 21	.91	Oct 11	.78	Jul 21 1997
ANNUAL SEVEN-DAY MINIMUM	1.1	Oct 10	1.1	Oct 10	1.1	Oct 10 1997
INSTANTANEOUS PEAK FLOW			499	Jun 16	515	Dec 9 1996
INSTANTANEOUS PEAK STAGE			13.16	Jun 16	13.18	Dec 9 1996
INSTANTANEOUS LOW FLOW			.70	Oct 11	.62	Oct 3 1995
ANNUAL RUNOFF (CFSM)	1.58		2.68		2.29	
ANNUAL RUNOFF (INCHES)	21.39		36.44		31.13	
10 PERCENT EXCEEDS	76		168		139	
50 PERCENT EXCEEDS	35		49		41	
90 PERCENT EXCEEDS	2.1		4.2		4.2	

PASKAMANSET RIVER NEAR SOUTH DARTMOUTH, MA 01105933



## TAUNTON RIVER BASIN

01108000 TAUNTON RIVER NEAR BRIDGEWATER, MA

LOCATION.--Lat 41°56'02", long 70°57'25", Plymouth County, Hydrologic Unit 01090004, on right bank at bridge on Titicut Road, 1 mi upstream from Sawmill Brook, 3.5 mi northwest of Middleboro, and 4.0 mi southeast of Bridgewater.

DRAINAGE AREA.--258 mi<sup>2</sup>.

## WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to April 1976, April 1985 to May 1988, October 1996 to curent year. Published as "at State Farm" October 1929 to September 1969, and as "at State Farm near Bridgewater" October 1969 to April 1976.

REVISED RECORDS.--WSP 781: 1934. WSP 1051: 1933. WSP 1201: 1931. WSP 1301: 1930(M), 1933(M), 1935(M). WDR MA-RI-84-1: Drainage area.

GAGE.--Water stage recorder. Datum of gage is 9.61 ft above sea level. Prior to October 1996, at sites 40 ft apart about 600 ft upstream: October 1929 to Sept. 30, 1931, inverted nonrecording gage with zero of gage at 10.02 ft; Oct. 1, 1931, to June 8, 1934, nonrecording gage, and June 9, 1934, to April 1976, April 1985 to May 1988, water-stage recorders, at present datum.

REMARKS.--Records good. Flow affected by diversions to and from basin for municipal supplies. Flow regulated by reservoirs and, prior to about 1975, by powerplants upstream. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--50 years (water years 1930-75, 1986-87, 1998), 476 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,980 ft<sup>3</sup>/s, Mar. 20, 1968, gage height, 14.48 ft; minimum, 8.0 ft<sup>3</sup>/s, Sept. 10, 1944; minimum daily, 9.0 ft<sup>3</sup>/s, Sept. 9-12, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,270 ft<sup>3</sup>/s, Feb. 26, gage height, 10.99 ft; minimum, 47 ft<sup>3</sup>/s, Oct. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	89	294	424	1250	2370	869	846	458	2040	237	278
2	50	372	381	365	1130	2180	1080	876	453	2560	213	247
3	50	391	339	338	1020	1970	1170	922	465	2390	193	217
4	56	342	329	325	937	1750	1090	861	457	2000	181	193
5	60	288	317	314	914	1560	1000	838	403	1620	182	173
6	66	228	296	307	958	1430	918	997	365	1410	156	156
7	65	182	272	318	926	1300	849	1410	344	1230	143	144
8	65	166	250	594	878	1180	784	1680	337	1090	140	205
9	65	265	229	891	804	1410	744	1620	330	964	134	210
10	63	426	216	986	739	2370	1040	1700	307	864	128	186
11	61	411	205	886	688	2870	1240	2220	284	767	130	167
12	59	345	196	751	834	2740	1130	2590	268	689	214	154
13	57	278	191	656	1100	2360	984	2530	497	625	202	143
14	57	270	181	628	1040	1980	892	2230	1740	572	177	132
15	58	549	164	548	909	1700	821	1870	2460	519	165	125
16	56	535	152	718	808	1520	766	1570	2800	475	151	129
17	56	452	147	955	739	1380	782	1370	2780	437	231	128
18	59	385	142	875	1190	1270	1120	1190	2520	406	636	117
19	59	325	136	785	1930	1370	1140	1040	2230	369	648	108
20	60	274	133	774	2090	1730	1120	917	2050	348	582	102
21	61	241	130	765	1910	1820	1190	823	1840	388	488	98
22	58	279	122	689	1660	1780	1100	742	1580	332	408	142
23	59	374	127	641	1440	1750	1030	675	1390	304	334	255
24	60	356	159	1330	1670	1670	1270	617	1220	339	344	212
25	66	329	207	2240	2770	1550	1400	568	1100	297	335	179
26	111	299	337	2570	3220	1410	1320	535	986	269	297	158
27	90	286	364	2330	3080	1290	1220	500	905	252	298	138
28	111	259	358	1940	2690	1190	1120	468	842	238	262	124
29	91	238	325	1640	---	1100	1010	438	764	231	292	108
30	88	218	526	1480	---	1000	915	426	1010	244	327	101
31	82	---	600	1370	---	928	---	394	---	237	291	---
TOTAL	2052	9452	7825	29433	39324	51928	31114	35463	33185	24506	8519	4829
MEAN	66.2	315	252	949	1404	1675	1037	1144	1106	791	275	161
MAX	111	549	600	2570	3220	2870	1400	2590	2800	2560	648	278
MIN	50	89	122	307	688	928	744	394	268	231	128	98

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

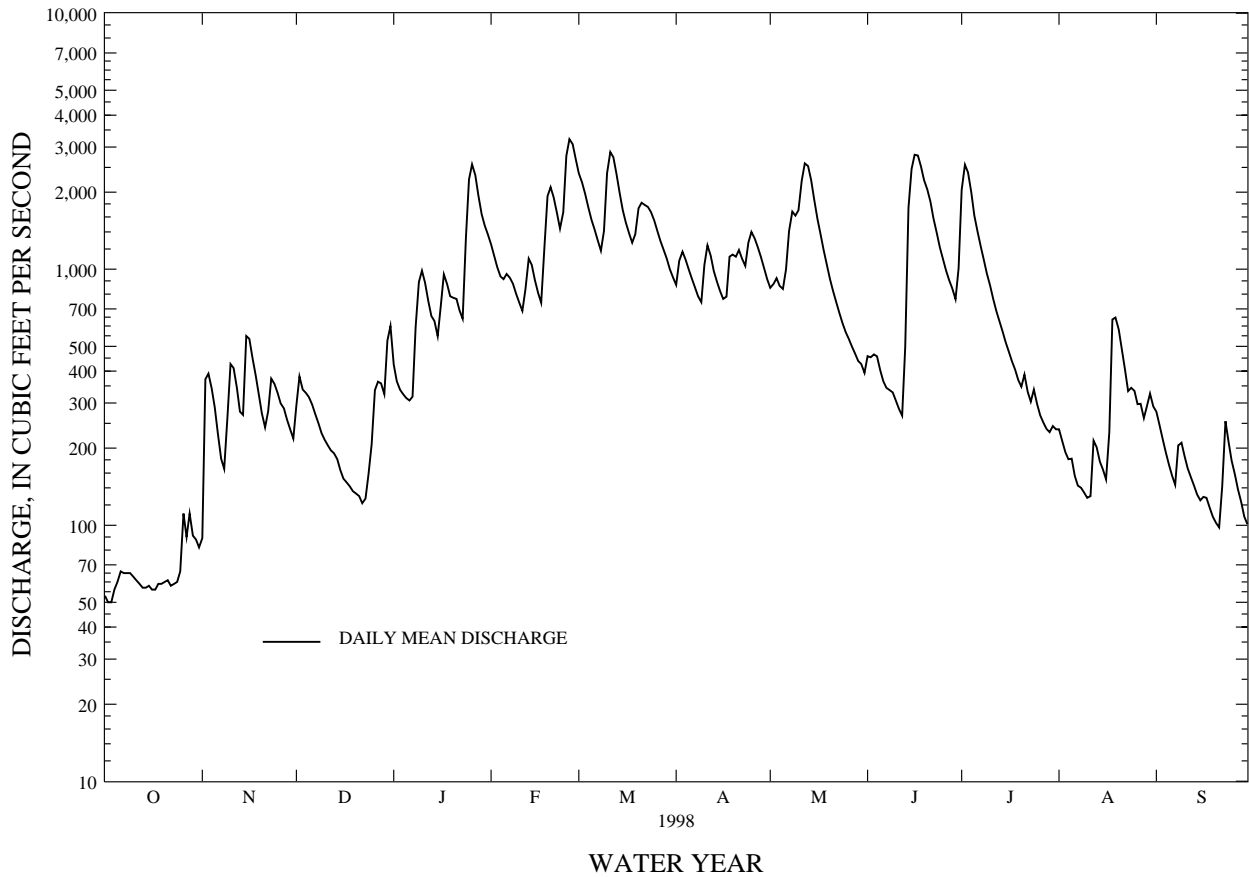
	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	227	411	569	626	711	954	863	540	328	190	154	177	1214	1309	1614	1346	1404	1714	1895	1378	1106	1021	1049	840	1997	1956	1946	1976	1998	1968	1987	1954	1998	1938	1955	1933	36.9	56.6	82.7	122	204	495	192	196	93.8	36.4	28.0	32.9	1942	1966	1966	1966	1944	1944	1966	1965	1965	1965	1957	1934	1957								

TAUNTON RIVER BASIN

01108000 TAUNTON RIVER NEAR BRIDGEWATER, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1930 - 1998	
ANNUAL TOTAL	167060		277630			
ANNUAL MEAN	458		761		476	
HIGHEST ANNUAL MEAN					761 1998	
LOWEST ANNUAL MEAN					171 1966	
HIGHEST DAILY MEAN	2400		3220		4930 Mar 20 1968	
LOWEST DAILY MEAN	50		50		9.0 Sep 9 1944	
ANNUAL SEVEN-DAY MINIMUM	52		57		11 Sep 6 1944	
INSTANTANEOUS PEAK FLOW			3270		4980 Mar 20 1968	
INSTANTANEOUS PEAK STAGE			10.99		14.48 Mar 20 1968	
INSTANTANEOUS LOW FLOW			47		8.0 Sep 10 1944	
10 PERCENT EXCEEDS	978		1800		1060	
50 PERCENT EXCEEDS	299		468		348	
90 PERCENT EXCEEDS	61		111		68	

TAUNTON RIVER NEAR BRIDGEWATER, MA 01108000





TAUNTON RIVER BASIN

01108000 TAUNTON RIVER NEAR BRIDGEWATER, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953, 1967-74, 1997-98.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	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)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED OF (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)
NOV											
03...	1100	190	7.3	16.5	13.0	65	2.3	760	5.5	52	27
MAR											
16...	1030	135	6.4	5.5	4.0	80	--	770	12.2	95	19
JUN											
22...	1100	118	6.3	20.0	21.0	240	2.0	763	4.3	48	40
AUG											
17...	1130	207	6.6	23.5	23.0	--	--	762	7.5	88	--

DATE	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD- NESS TOTAL AS (MG/L 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)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DISIT FIELD MG/LAS HCO3 (00453)
NOV											
03...	3.0	3100	--	--	--	--	--	--	--	--	12
MAR											
16...	1.0	K35	40	19	4.9	1.5	16	64	2	1.2	8
JUN											
22...	3.0	--	--	--	--	--	--	--	--	--	--
AUG											
17...	4.0	150	190	--	--	--	--	--	--	--	--

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HY- DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV											
03...	0	0	10	--	--	--	--	6	118	0.034	0.613
MAR											
16...	0	0	6	9.0	25	<0.10	64	1	93	<.010	.280
JUN											
22...	0	0	--	--	--	--	--	16	109	.024	.276
AUG											
17...	0	0	--	--	--	--	--	--	--	.016	1.52

TAUNTON RIVER BASIN

01108000 TAUNTON RIVER NEAR BRIDGEWATER, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)
------	--	--	---	---	--	---	--	---	--	--	--

NOV											
03...	<0.020	--	--	0.66	1.3	0.149	0.106	180	63	<1.0	<1
MAR											
16...	.269	0.35	0.46	.73	1.0	.050	.033	160	119	<1.0	<1
JUN											
22...	.152	.20	.94	1.1	1.4	.137	.059	230	156	<1.0	<1
AUG											
17...	.054	.07	.56	.61	2.1	.148	.079	120	--	--	1

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
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NOV											
03...	<1	18	<1.0	<0.10	<1.0	<1.0	2.9	680	0.69	260	239
MAR											
16...	<1	12	<1.0	<.10	<1.0	<1.0	1.9	310	.59	36	36
JUN											
22...	1	16	<1.0	<1.0	1.1	<1.0	3.3	4500	1.4	200	188
AUG											
17...	--	--	<1.0	--	--	--	--	1200	1.0	140	--

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHENOLS TOTAL (UG/L) (32730)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
------	--	--	---	--	---	---	---	--	---------------------------------------	---	--

NOV											
03...	<0.10	<1.0	1.7	<1	<1.0	28	<1.0	--	--	10	82
MAR											
16...	<.10	<1.0	<1.0	<1	<.20	15	<1.0	9.8	<1	5	60
JUN											
22...	<.10	<1.0	1.9	<1	<.20	14	<1.0	19	<1	11	75
AUG											
17...	<.10	--	--	--	<.20	--	--	8.5	2	6	71



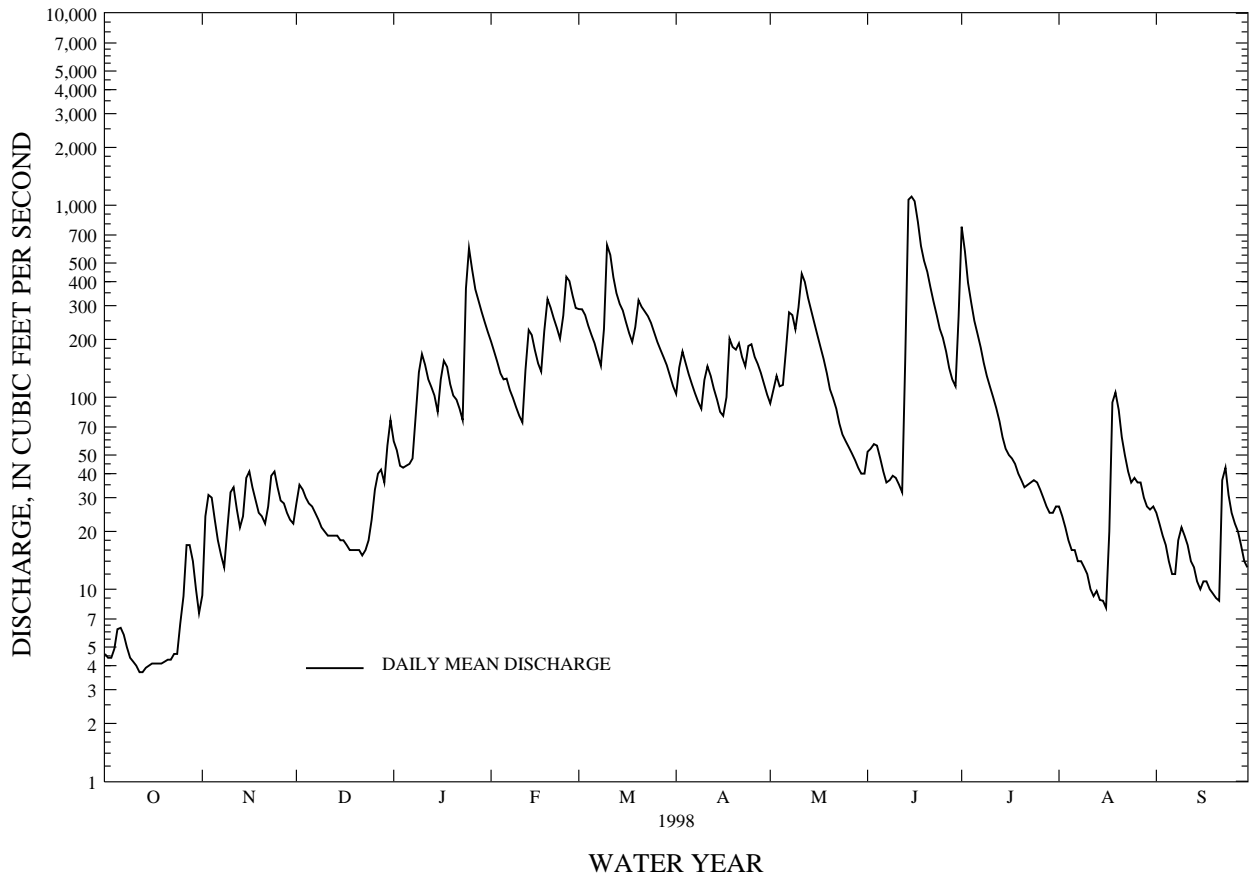
TAUNTON RIVER BASIN

01109000 WADING RIVER NEAR NORTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1925 - 1998	
ANNUAL TOTAL	22503.0		43527.2		73.9	
ANNUAL MEAN	61.7		119		123	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					28.8	
HIGHEST DAILY MEAN	430		1110		1280	
LOWEST DAILY MEAN	2.5		3.7		.30	
ANNUAL SEVEN-DAY MINIMUM	2.9		3.9		.62	
INSTANTANEOUS PEAK FLOW	Apr 5		Jun 15		Mar 19	
INSTANTANEOUS PEAK STAGE	Aug 3		Oct 12		Sep 10	
INSTANTANEOUS LOW FLOW	Jul 30		Oct 11		Aug 30	
10 PERCENT EXCEEDS	148		287		169	
50 PERCENT EXCEEDS	26		53		51	
90 PERCENT EXCEEDS	4.2		9.9		6.8	

e Estimated

WADING RIVER NEAR NORTON, MA 01109000



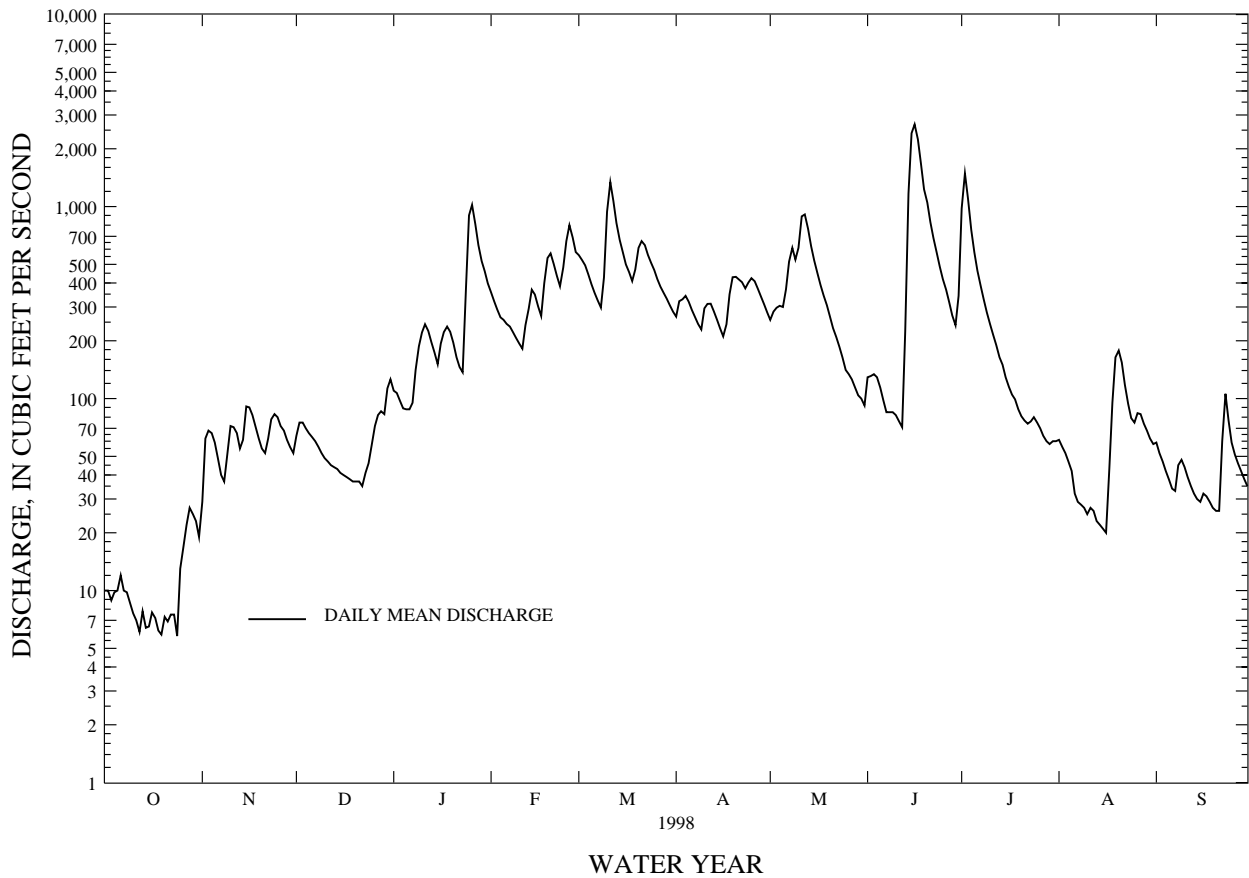


01109060 THREEMILE RIVER AT NORTH DIGHTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1966 - 1998	
ANNUAL TOTAL	46490.1		91364.5		170	
ANNUAL MEAN	127		250		255	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					64.4	
HIGHEST DAILY MEAN	782	Apr 6	2680	Jun 16	2680	Jun 16 1998
LOWEST DAILY MEAN	1.3	Aug 5	5.8	Oct 24	1.3	Aug 5 1997
ANNUAL SEVEN-DAY MINIMUM	6.7	Oct 18	6.7	Oct 18	2.9	Sep 7 1995
INSTANTANEOUS PEAK FLOW			2870	Jun 16	2870	Jun 16 1998
INSTANTANEOUS PEAK STAGE			8.89	Jun 16	8.89	Jun 16 1998
INSTANTANEOUS LOW FLOW			5.2	Oct 22		
10 PERCENT EXCEEDS	309		579		384	
50 PERCENT EXCEEDS	63		115		115	
90 PERCENT EXCEEDS	9.6		26		22	

e Estimated

THREEMILE RIVER AT NORTH DIGHTON, MA 01109060



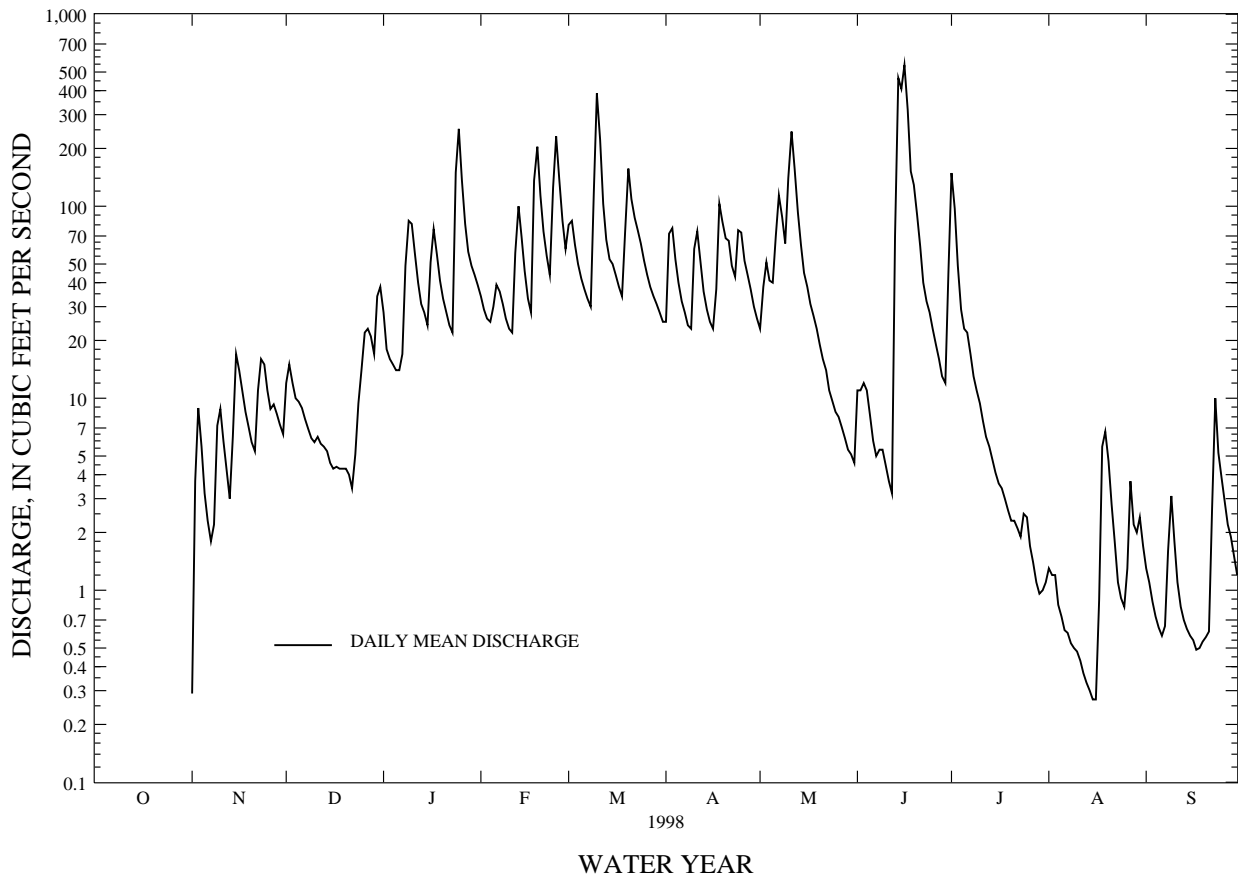


TAUNTON RIVER BASIN

01109070 SEGREGANSET RIVER NEAR DIGHTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1966 - 1998	
ANNUAL TOTAL	6330.16		12586.40			
ANNUAL MEAN	17.3		34.5		22.6	
HIGHEST ANNUAL MEAN					34.5 1998	
LOWEST ANNUAL MEAN					7.68 1981	
HIGHEST DAILY MEAN	143	Apr 5	543	Jun 16	670	Mar 18 1968
LOWEST DAILY MEAN	.00	Aug 3	.00	Oct 1	.00	Aug 13 1966
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 3	.00	Oct 1	.00	Aug 13 1966
INSTANTANEOUS PEAK FLOW			588	Jun 16	867	Mar 18 1968
INSTANTANEOUS PEAK STAGE			6.15	Jun 16	7.51	Mar 18 1968
INSTANTANEOUS LOW FLOW			.00	Oct 1	.00	Aug 13 1966
ANNUAL RUNOFF (CFSM)	1.64		3.25		2.14	
ANNUAL RUNOFF (INCHES)	22.22		44.17		29.03	
10 PERCENT EXCEEDS	43		83		52	
50 PERCENT EXCEEDS	8.8		12		13	
90 PERCENT EXCEEDS	.00		.35		.49	

SEGREGANSET RIVER NEAR DIGHTON, MA 01109070





## TEN MILE RIVER BASIN

01109403 TEN MILE RIVER AT PAWTUCKET AVENUE AT EAST PROVIDENCE, RI

LOCATION.--Lat 41°49'51", long 71°21'06", Providence County, Hydrologic Unit 01090004, on right bank on upstream side of bridge on State Highways 1A and 114, 0.3 mi south of junction with State Highway 114A, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--53.1 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 5 ft above sea level, from topographic map.

REMARKS.--Records good. Flow affected by regulation and diversions from reservoirs upstream.

AVERAGE DISCHARGE.--12 years, 109 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft<sup>3</sup>/s, June 15, 1998, gage height, 8.50 ft; minimum, 5.0 ft<sup>3</sup>/s, Apr. 19, 1991; minimum daily, 6.6 ft<sup>3</sup>/s, Apr. 19, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft<sup>3</sup>/s, June 15, gage height, 8.50 ft; minimum, 14 ft<sup>3</sup>/s, Oct. 18, 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	53	74	91	178	308	151	110	117	1050	55	52
2	19	128	72	73	158	307	227	159	93	927	47	44
3	22	111	62	67	147	268	245	188	103	523	46	41
4	23	72	60	67	139	232	193	164	85	356	44	39
5	25	56	58	68	158	212	159	168	70	291	40	35
6	24	49	54	69	141	193	141	245	63	248	39	32
7	21	47	52	81	132	174	133	370	61	211	37	39
8	18	51	50	138	122	167	123	389	65	181	36	66
9	18	81	49	206	110	318	125	307	66	159	34	56
10	19	84	48	193	105	757	195	349	63	146	33	44
11	18	67	51	152	101	765	195	515	59	123	37	39
12	16	55	47	123	206	498	157	497	58	110	38	36
13	16	50	45	110	272	368	128	396	280	100	34	35
14	17	78	44	107	216	312	113	320	1040	95	32	33
15	18	107	42	96	160	288	108	275	1380	91	32	34
16	19	88	41	175	135	261	105	247	1180	85	31	41
17	16	70	41	185	126	233	161	221	954	80	123	39
18	16	62	40	146	272	214	298	204	681	75	292	35
19	18	58	39	120	367	296	233	168	461	68	239	32
20	16	55	62	110	295	410	219	136	390	66	125	33
21	16	52	66	102	230	379	222	126	353	65	90	32
22	16	80	43	94	190	326	176	109	298	62	75	64
23	16	93	52	100	169	298	172	97	260	56	66	65
24	18	78	51	537	287	270	222	90	236	66	61	48
25	36	67	62	820	475	245	239	83	210	60	58	42
26	41	62	75	598	453	218	217	84	181	55	76	40
27	51	64	77	396	352	201	233	76	161	50	72	37
28	43	54	76	310	290	182	187	73	135	49	62	36
29	34	52	67	256	---	174	131	69	129	51	67	32
30	35	50	103	227	---	159	118	75	291	60	78	31
31	31	---	118	204	---	152	---	68	---	58	57	---
TOTAL	719	2074	1821	6021	5986	9185	5326	6378	9523	5617	2156	1232
MEAN	23.2	69.1	58.7	194	214	296	178	206	317	181	69.5	41.1
MAX	51	128	118	820	475	765	298	515	1380	1050	292	66
MIN	16	47	39	67	101	152	105	68	58	49	31	31

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

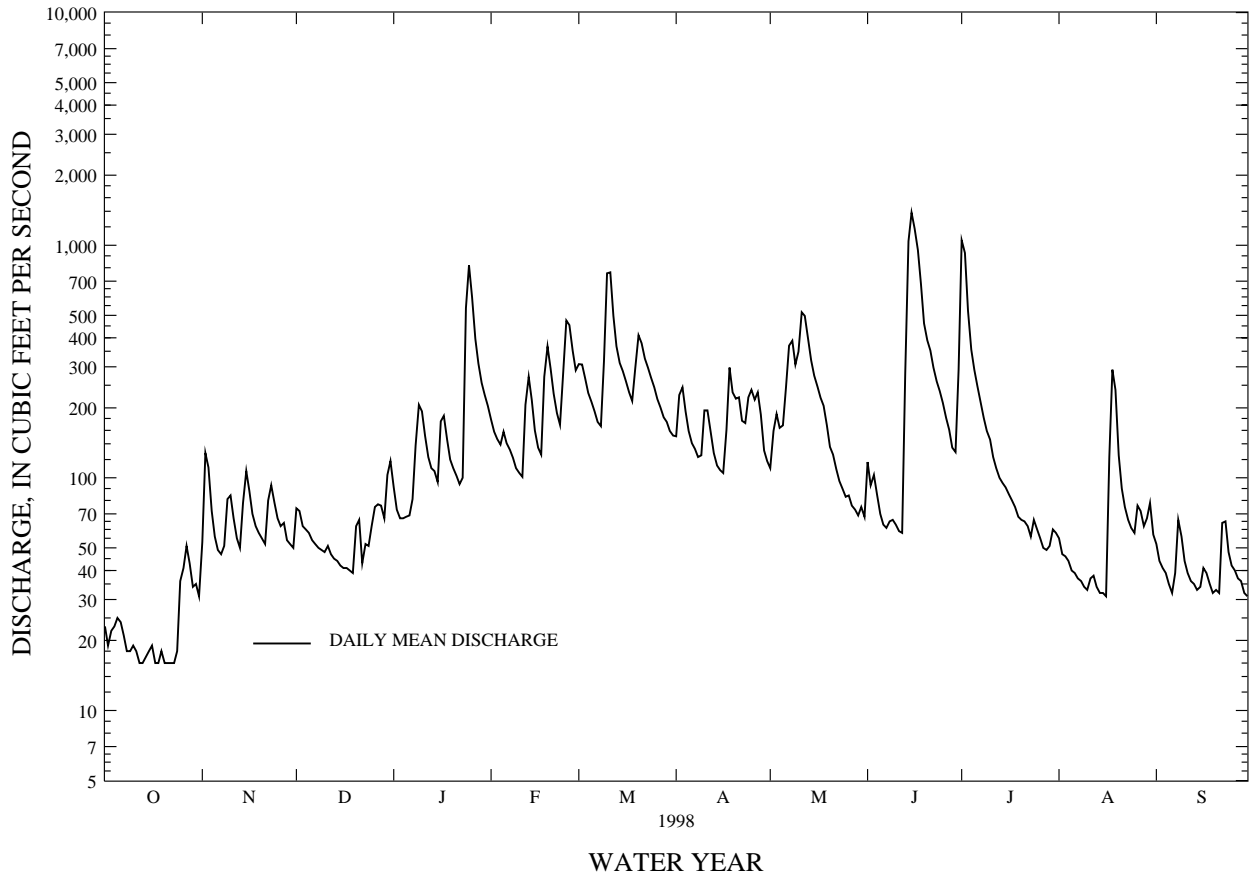
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	63.9	100	146	141	144	178	192	117	78.5	50.1	51.5	46.9
MAX	171	223	304	201	261	348	407	206	317	181	119	94.4
(WY)	1990	1990	1993	1987	1988	1994	1987	1998	1998	1998	1989	1987
MIN	23.1	44.8	51.8	41.4	60.5	90.2	78.0	60.4	32.1	21.3	16.6	22.3
(WY)	1994	1994	1989	1989	1989	1989	1995	1992	1991	1991	1993	1993

TEN MILE RIVER BASIN

01109403 TEN MILE RIVER AT PAWTUCKET AVENUE AT EAST PROVIDENCE, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1987 - 1998	
ANNUAL TOTAL	32974		56038			
ANNUAL MEAN	90.3		154		109	
HIGHEST ANNUAL MEAN					154 1998	
LOWEST ANNUAL MEAN					67.5 1995	
HIGHEST DAILY MEAN	464	Apr 6	1380	Jun 15	1380	Jun 15 1998
LOWEST DAILY MEAN	15	Jul 20	16	Oct 12	6.6	Apr 19 1991
ANNUAL SEVEN-DAY MINIMUM	16	Oct 17	16	Oct 17	12	Aug 31 1993
INSTANTANEOUS PEAK FLOW			1450	Jun 15	1450	Jun 15 1998
INSTANTANEOUS PEAK STAGE			8.50	Jun 15	8.50	Jun 15 1998
INSTANTANEOUS LOW FLOW			14	Oct 18	5.0	Apr 19 1991
10 PERCENT EXCEEDS	197		311		224	
50 PERCENT EXCEEDS	62		91		80	
90 PERCENT EXCEEDS	19		34		24	

TEN MILE RIVER, PAWTUCKET AVE. AT EAST PROVIDENCE, RI 01109403



## BLACKSTONE RIVER BASIN

01110000 QUINSIGAMOND RIVER AT NORTH GRAFTON, MA

LOCATION.--Lat 42°13'49", long 71°42'41", Worcester County, Hydrologic Unit 01090003, on right bank 800 ft downstream from dam at outlet of Hovey Pond at North Grafton and 0.3 mi upstream from Bummett Brook.

DRAINAGE AREA.--25.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 335 ft above sea level, from topographic map. Prior to Dec. 7, 1939, staff gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by Lake Quinsigamond 2.3 mi upstream and by ponds upstream.

AVERAGE DISCHARGE.--59 years, 41.6 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 820 ft<sup>3</sup>/s, Aug. 20, 1955, gage height, 5.15 ft; no flow Aug. 6-9, 22, 1966 (caused by unusual regulation), Sept. 13-17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 424 ft<sup>3</sup>/s, Mar. 10, gage height, 3.70 ft; minimum daily, 0.50 ft<sup>3</sup>/s, Oct. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	12	30	36	54	98	64	37	47	129	18	5.1
2	.74	36	33	31	50	90	86	46	46	119	15	4.4
3	.62	39	22	29	47	82	87	51	52	97	13	4.0
4	.98	32	23	29	46	77	79	56	46	79	11	3.6
5	1.6	27	22	33	47	69	72	62	37	69	13	3.3
6	2.3	22	22	36	44	64	66	69	30	58	16	2.5
7	2.3	19	20	46	41	58	60	74	26	49	11	2.7
8	1.9	17	18	82	39	56	54	68	26	44	9.4	3.4
9	1.5	26	16	106	37	154	58	64	25	41	7.9	3.0
10	1.7	40	15	106	36	408	73	122	23	38	6.8	2.4
11	1.9	35	15	91	34	370	69	173	20	34	6.3	1.8
12	1.2	27	14	78	64	293	61	185	19	29	7.1	1.5
13	.90	23	13	68	82	222	56	165	89	26	7.4	1.4
14	.79	23	13	65	77	178	50	140	285	24	6.3	1.1
15	.68	26	12	55	67	155	47	117	284	22	5.4	1.1
16	.54	23	11	58	59	128	44	101	225	20	5.0	1.5
17	.50	20	11	52	54	110	45	87	180	18	5.6	1.5
18	.70	17	11	47	95	96	55	78	155	17	6.8	1.2
19	.79	15	10	44	124	126	47	69	134	15	7.2	.95
20	.90	14	10	41	115	166	61	59	129	14	5.6	.88
21	1.6	13	9.6	39	103	148	62	55	109	14	4.9	.90
22	1.9	21	9.0	34	88	141	55	51	92	13	4.5	4.9
23	1.5	26	14	35	78	123	51	43	80	14	4.0	14
24	1.2	26	17	103	96	111	66	39	72	21	8.0	10
25	2.2	23	19	139	140	101	63	34	65	18	8.8	8.5
26	3.0	20	22	119	133	92	56	33	58	16	9.6	7.6
27	6.5	24	22	98	113	90	53	31	53	13	9.7	7.4
28	10	19	22	83	98	83	48	29	46	11	8.3	7.1
29	7.7	18	20	73	---	81	43	27	43	11	7.2	5.3
30	7.2	17	38	65	---	73	39	29	69	12	6.1	4.3
31	6.8	---	42	59	---	67	---	26	---	15	5.8	---
TOTAL	73.34	700	575.6	1980	2061	4110	1770	2220	2565	1100	260.7	117.33
MEAN	2.37	23.3	18.6	63.9	73.6	133	59.0	71.6	85.5	35.5	8.41	3.91
MAX	10	40	42	139	140	408	87	185	285	129	18	14
MIN	.50	12	9.0	29	34	56	39	26	19	11	4.0	.88

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

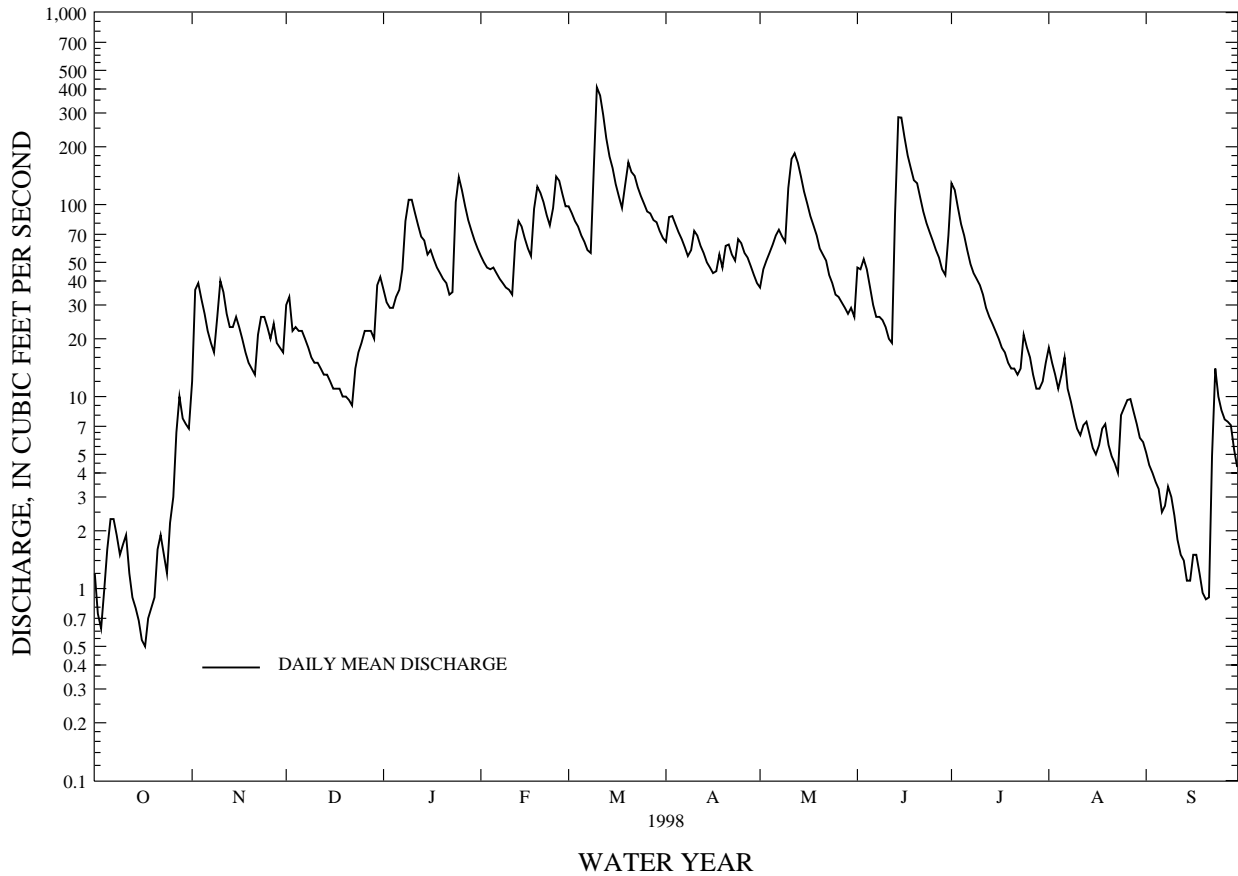
	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	20.7	33.1	44.3	48.4	54.1	78.2	77.5	52.6	38.1	20.0	17.5	15.3																																															
MAX	94.3	149	109	159	141	154	202	92.3	143	64.2	169	130																																															
(WY)	1956	1956	1997	1979	1970	1972	1987	1954	1982	1959	1955	1954																																															
MIN	1.22	1.80	3.07	7.85	11.0	29.4	22.5	19.2	11.5	2.67	1.05	.70																																															
(WY)	1943	1942	1942	1981	1977	1989	1966	1965	1995	1965	1965	1995																																															

BLACKSTONE RIVER BASIN

01110000 QUINSIGAMOND RIVER AT NORTH GRAFTON, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1940 - 1998	
ANNUAL TOTAL	12379.47	17532.97	41.6	
ANNUAL MEAN	33.9	48.0	68.4	1956
HIGHEST ANNUAL MEAN			16.5	1966
LOWEST ANNUAL MEAN			790	Aug 20 1955
HIGHEST DAILY MEAN	177 Apr 20	408 Mar 10	.00	Aug 6 1966
LOWEST DAILY MEAN	.06 Aug 4	.50 Oct 17	.01	Sep 11 1980
ANNUAL SEVEN-DAY MINIMUM	.09 Aug 3	.70 Oct 13	820	Aug 20 1955
INSTANTANEOUS PEAK FLOW		424 Mar 10	5.15	Aug 20 1955
INSTANTANEOUS PEAK STAGE		3.70 Mar 10	88	
10 PERCENT EXCEEDS	79	110	31	
50 PERCENT EXCEEDS	22	33	5.7	
90 PERCENT EXCEEDS	.99	2.4		

QUINSIGAMOND RIVER AT NORTH GRAFTON, MA 01110000



## BLACKSTONE RIVER BASIN

01110500 BLACKSTONE RIVER AT NORTHBRIDGE, MA

LOCATION.--Lat 42°01'22", long 71°34'22", Worcester County, Hydrologic Unit 01090003, on left bank at Northbridge, 100 ft downstream from Sutton Street Bridge, and 3.0 mi downstream from Quinsigamond River.

DRAINAGE AREA.--139 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: October 1939 to September 1977. October 1995 to current year. October and November 1939 monthly discharge only, published in WSP 1301.

Water-quality records: Water years, 1955, 1958, 1971.

REVISED RECORDS.--WSP 1301: 1940 (M).

GAGE.--Water-stage recorder. Telephone and satellite gage-height telemeter at station. Altitude of gage is 260 ft, from topographic map.

REMARKS.--Records good except those for Nov. 24 to Jan. 7 and June 28 to Sept. 30 (unusual regulation), which are poor. Flow regulated by mills and reservoirs upstream. Daily discharge includes flow diverted from Nashua River Basin and, at times, from Quabbin Reservoir to Blackstone River Basin for municipal supply of Worcester.

AVERAGE DISCHARGE.--41 years (water years 1940-77, 1996, 1997-98), 273 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft<sup>3</sup>/s, Aug. 20, 1955, gage height, 16.74 ft, from rating curve extended above 3,800 ft<sup>3</sup>/s on basis of computation of flow over dam at gage height 13.7 ft and slope-area measurement at gage height 16.74 ft; maximum gage height, 17.53 ft, Aug. 20, 1955, backwater from debris; minimum daily, 2 ft<sup>3</sup>/s, Aug. 29, 1941, Sept. 5, 1942, Aug. 28, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Stage and discharge of flood of Aug. 20, 1955 are the greatest since at least 1900. Flood of Mar. 19, 1936, reached a stage of 13.7 ft from floodmarks, discharge, 7,510 ft<sup>3</sup>/s by computation of flow over dam 800 ft upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,440 ft<sup>3</sup>/s, Mar. 10, gage height, 10.70 ft; minimum daily, 29 ft<sup>3</sup>/s, Dec. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	168	298	106	363	696	433	262	410	1130	89	74
2	61	470	212	75	341	632	675	376	279	777	61	73
3	59	288	168	93	333	559	601	431	348	571	83	105
4	69	220	138	141	333	507	519	429	266	454	110	136
5	70	197	125	169	330	468	464	563	222	346	132	121
6	67	179	114	196	316	434	426	570	218	290	161	110
7	60	163	100	355	295	405	394	570	251	231	144	113
8	55	152	88	839	282	386	370	510	246	210	89	103
9	54	274	78	911	274	1700	406	494	263	200	126	60
10	59	317	68	736	262	3480	575	1130	222	183	93	61
11	61	238	57	548	257	1600	506	1540	172	184	92	58
12	58	203	45	430	805	1310	430	1380	190	227	88	58
13	60	177	48	393	857	1090	376	998	1050	166	83	60
14	71	174	87	388	584	926	350	790	2390	133	74	60
15	74	178	67	369	444	835	325	670	1720	126	43	62
16	87	175	78	355	380	705	312	582	1210	114	114	63
17	73	162	63	336	366	646	327	517	950	110	96	34
18	67	150	29	307	1100	656	379	471	851	98	121	64
19	64	143	70	289	1080	1080	333	420	844	98	115	62
20	66	132	76	275	801	1360	506	382	966	105	97	102
21	66	131	75	254	673	1090	447	339	754	107	64	74
22	65	229	69	236	588	962	382	307	626	100	74	181
23	65	217	34	230	525	845	344	282	536	143	115	156
24	64	185	40	1170	811	771	516	259	459	172	142	102
25	92	167	101	1070	1310	723	451	242	398	162	87	78
26	89	147	125	764	962	659	393	233	346	168	91	92
27	176	167	58	585	738	637	357	215	298	134	79	143
28	128	140	38	494	636	594	319	194	263	101	76	94
29	99	127	66	486	---	556	297	188	270	100	74	71
30	92	116	292	428	---	509	280	218	598	112	73	76
31	81	---	181	393	---	454	---	171	---	154	74	---
TOTAL	2319	5786	3088	13421	16046	27275	12493	15733	17616	7206	2960	2646
MEAN	74.8	193	99.6	433	573	880	416	508	587	232	95.5	88.2
MAX	176	470	298	1170	1310	3480	675	1540	2390	1130	161	181
MIN	54	116	29	75	257	386	280	171	172	98	43	34

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

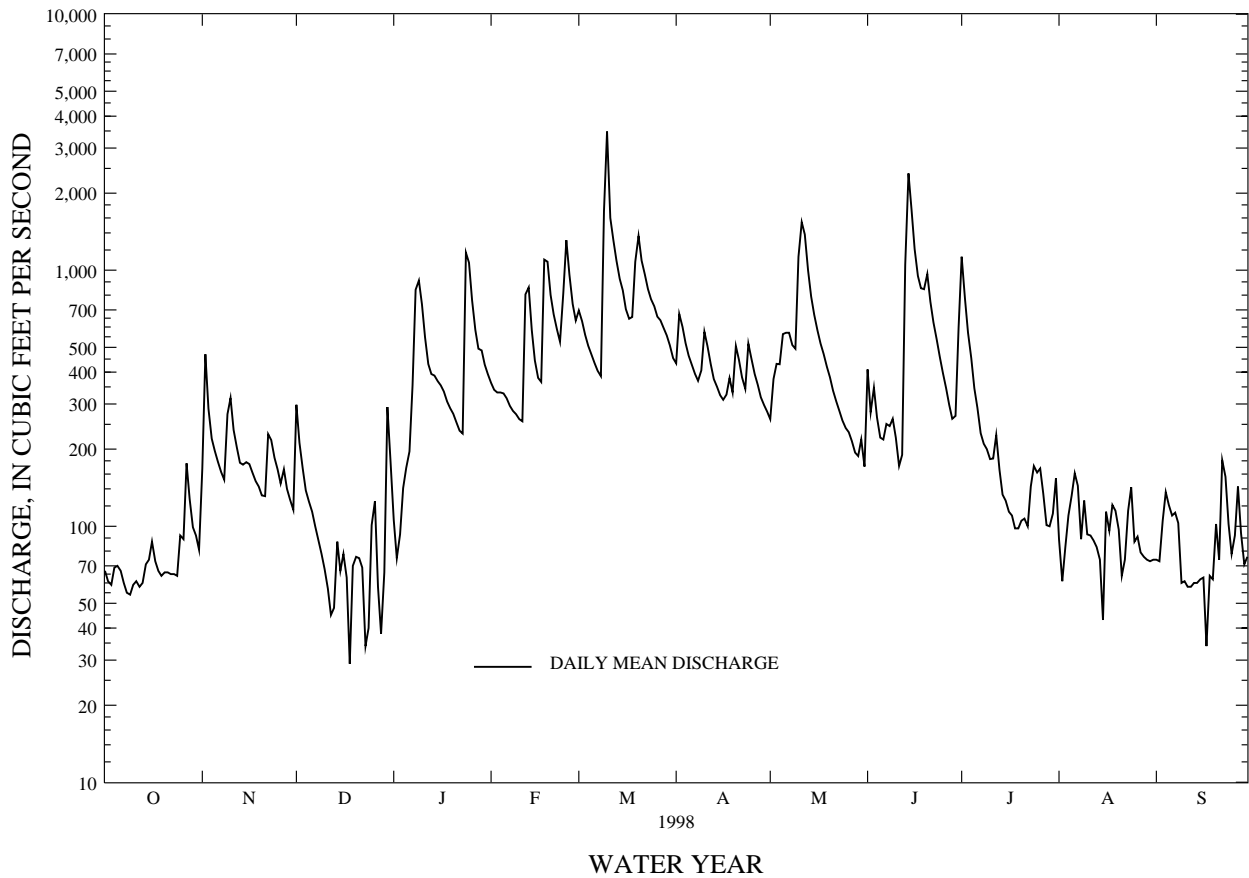
	1940	1942	1942	1942	1944	1944	1944	1941	1941	1941	1957	1957	1957	1957	1965	1965	1965	1965
MEAN	165	230	275	298	338	519	486	310	231	145	142	144						
MAX	717	766	833	624	832	1072	923	608	661	428	1195	805						
(WY)	1956	1956	1997	1996	1970	1972	1956	1972	1972	1959	1955	1954						
MIN	53.5	67.7	86.9	93.8	153	250	192	123	98.4	58.4	51.2	56.8						
(WY)	1942	1942	1942	1944	1944	1941	1966	1941	1957	1957	1965	1943						

BLACKSTONE RIVER BASIN

01110500 BLACKSTONE RIVER AT NORTHBRIDGE, MA--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1940 - 1998	
ANNUAL TOTAL	97949		126589			
ANNUAL MEAN	268		347		273	
HIGHEST ANNUAL MEAN					408	1955
LOWEST ANNUAL MEAN					132	1965
HIGHEST DAILY MEAN	1550	Apr 19	3480	Mar 10	8850	Aug 20 1955
LOWEST DAILY MEAN	29	Dec 18	29	Dec 18	2.0	Aug 29 1941
ANNUAL SEVEN-DAY MINIMUM	54	Sep 22	56	Dec 18	29	Aug 4 1965
INSTANTANEOUS PEAK FLOW			4440	Mar 10	16900	Aug 20 1955
INSTANTANEOUS PEAK STAGE			10.70	Mar 10	16.74	Aug 20 1955
10 PERCENT EXCEEDS	611		803		571	
50 PERCENT EXCEEDS	165		222		190	
90 PERCENT EXCEEDS	60		66		77	

BLACKSTONE RIVER AT NORTHBRIDGE, MA 01110500



BLACKSTONE RIVER BASIN

01111230 BLACKSTONE RIVER AT MILLVILLE, MA

LOCATION.--Lat 42°01'22", long 71°34'22", Worcester County, Hydrologic Unit 01090003, on railroad bridge, 0.6 mi southeast of Millville, and 1.6 mi upstream from Branch River. Prior to December 1980, at site 0.2 mi downstream.

DRAINAGE AREA.--277 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1969 to December 1980.

pH: July 1969 to December 1980.

WATER TEMPERATURE: July 1969 to December 1980.

DISSOLVED OXYGEN: July 1969 to December 1980.

REMARKS.--Discharge computed by discharge measurements on the day of sampling. Instantaneous records are representative of the cross section while continuous records are based on point samples.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,000 µS/cm, May 30, June 3, 5, 1975; minimum, 49 µS/cm, June 30, 1973.

pH: Maximum recorded, 9.3 units, Sept. 10, 1976; minimum, 4.3 units, Sept. 6, 1973.

WATER TEMPERATURE: Maximum recorded, 29.0°C, July 29, 1970, July 21, 1977, July 23, 1978; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum recorded, 14.9 mg/L, Feb. 25, 1971; minimum, 0.0 mg/L, July 12, 15-20, 26-30, Aug. 2, 3, 1971.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	
NOV 04...	0900	275	7.2	3.5	11.0	35	2.8	755	8.8	80	15
MAR 17...	0830	273	6.8	-.5	4.0	25	--	768	12.5	95	<10
JUN 23...	0830	184	6.8	17.5	21.0	55	2.1	755	7.6	86	<10
AUG 18...	0900	377	7.3	24.0	22.5	25	--	750	5.8	68	13

DATE	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	COLIFORMS, UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNESIUM SOLVED (MG/L AS MG) (00925)	SODIUM SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM SOLVED (MG/L AS K) (00935)	BICARBONATE WATER DISIT FIELD (MG/L AS HCO3) (00453)
NOV 04...	4.0	2100	1200	--	--	--	--	--	--	--	28
MAR 17...	2.0	600	360	33	10	1.8	34	67	3	2.1	18
JUN 23...	2.0	--	--	--	--	--	--	--	--	--	--
AUG 18...	2.0	180	K170	53	17	2.7	50	64	3	6.7	--

DATE	CARBONATE WATER DISIT FIELD (MG/L AS CO3) (00452)	HYDROXIDE WATER DISIT FIELD (MG/L AS OH) (71834)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	TOTAL RESIDUE AT 105 DEG. C, SOLVED (MG/L) (00500)	NITRO-SOLIDS, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 04...	0	0	23	--	--	--	--	15	149	0.074	0.902
MAR 17...	0	0	15	12	56	<0.10	129	3	151	.017	.578
JUN 23...	0	0	--	--	--	--	--	7	120	.045	.601
AUG 18...	--	--	--	24	73	.35	205	4	227	.031	2.67

BLACKSTONE RIVER BASIN

01111230 BLACKSTONE RIVER AT MILLVILLE, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 04...	0.099	0.13	0.91	1.0	1.9	0.231	0.160	190	22	<1.0	3
MAR 17...	.448	.58	.35	.80	1.4	.049	.026	130	48	<1.0	1
JUN 23...	.123	.16	.49	.61	1.2	.146	.062	200	48	<1.0	2
AUG 18...	.104	.13	.66	.76	3.4	.196	.101	70	--	--	3

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 04...	2	13	<1.0	0.58	1.1	<1.0	6.4	950	2.3	110	78
MAR 17...	<1	17	<1.0	.49	<1.0	<1.0	3.7	300	<.50	79	73
JUN 23...	2	16	<1.0	<1.0	<1.0	<1.0	5.3	930	1.1	110	94
AUG 18...	--	--	--	<1.0	--	--	--	500	<1.0	97	--

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHENOLS TOTAL (UG/L) (32730)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 04...	<0.10	1.6	8.5	<1	<1.0	37	<1.0	--	--	13	64
MAR 17...	<.10	<1.0	3.5	<1	<.20	26	<1.0	5.3	<1	3	71
JUN 23...	<.10	<1.0	3.2	<1	<.20	16	<1.0	7.1	<1	--	--
AUG 18...	<.10	--	--	--	<.20	--	--	5.9	2	--	--



## BLACKSTONE RIVER BASIN

01111300 NIPMUC RIVER NEAR HARRISVILLE, RI

LOCATION.--Lat 41°58'52", long 71°41'11", Providence County, Hydrologic Unit 01090003, on left bank 1.0 mi upstream from mouth and 1.2 mi northwest of Harrisville.

DRAINAGE AREA.--16.0 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: March 1964 to September 1991, October 1993 to current year.  
Water-quality records: Water year 1968.

GAGE.--Water-stage recorder. Elevation of gage is 340 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those greater than 350 ft<sup>3</sup>/s, which are poor.

AVERAGE DISCHARGE.--32 years (water years 1965-91, 1994-98), 30.8 ft<sup>3</sup>/s, 26.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft<sup>3</sup>/s, Jan. 25, 1979, gage height, 8.53 ft, from rating curve extended above 530 ft<sup>3</sup>/s; minimum, 0.02 ft<sup>3</sup>/s, Sept. 6-8, 15-17, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 724 ft<sup>3</sup>/s, Mar. 10, gage height, 6.63 ft; minimum, 0.55 ft<sup>3</sup>/s, Oct. 2, 3.

REVISIONS.--Revised daily discharges, in cubic feet per second, for the period June 17 to Sept. 30, 1997, are given below. These figures supersede those published in the report for 1997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	JUN	JUL	AUG	SEP
1	---	2.2	0.35	0.64
2	---	2.1	.27	.72
3	---	2.2	.22	.61
4	---	2.0	.28	.53
5	---	1.6	.75	.44
6	---	1.4	1.4	.37
7	---	1.2	.90	.34
8	---	1.1	.66	.38
9	---	1.1	.88	.46
10	---	1.4	1.2	.44
11	---	1.2	.70	.43
12	---	1.1	.49	2.2
13	---	.96	1.0	1.6
14	---	.83	2.8	1.1
15	---	.78	1.5	1.0
16	---	.94	1.2	.81
17	4.0	.93	.92	.68
18	4.0	.65	1.5	.60
19	6.1	.60	1.2	.52
20	5.8	.45	.77	.53
21	5.0	.39	2.6	.62
22	4.9	1.2	4.0	.61
23	5.6	.94	2.4	.55
24	4.8	.79	1.7	.53
25	4.5	1.1	1.3	.52
26	4.4	1.1	.96	.48
27	4.0	.76	.77	.45
28	3.2	.66	.61	.46
29	2.8	.64	.69	1.2
30	2.5	.47	1.0	1.5
31	---	.43	.71	---
TOTAL	206.2	33.22	35.73	21.32
MEAN	6.87	1.07	1.15	.71
MAX	13	2.2	4.0	2.2
MIN	2.5	.39	.22	.34
CFSM	.43	.07	.07	.04
IN.	.48	.08	.08	.05

SUMMARY STATISTICS FOR 1997 WATER YEAR

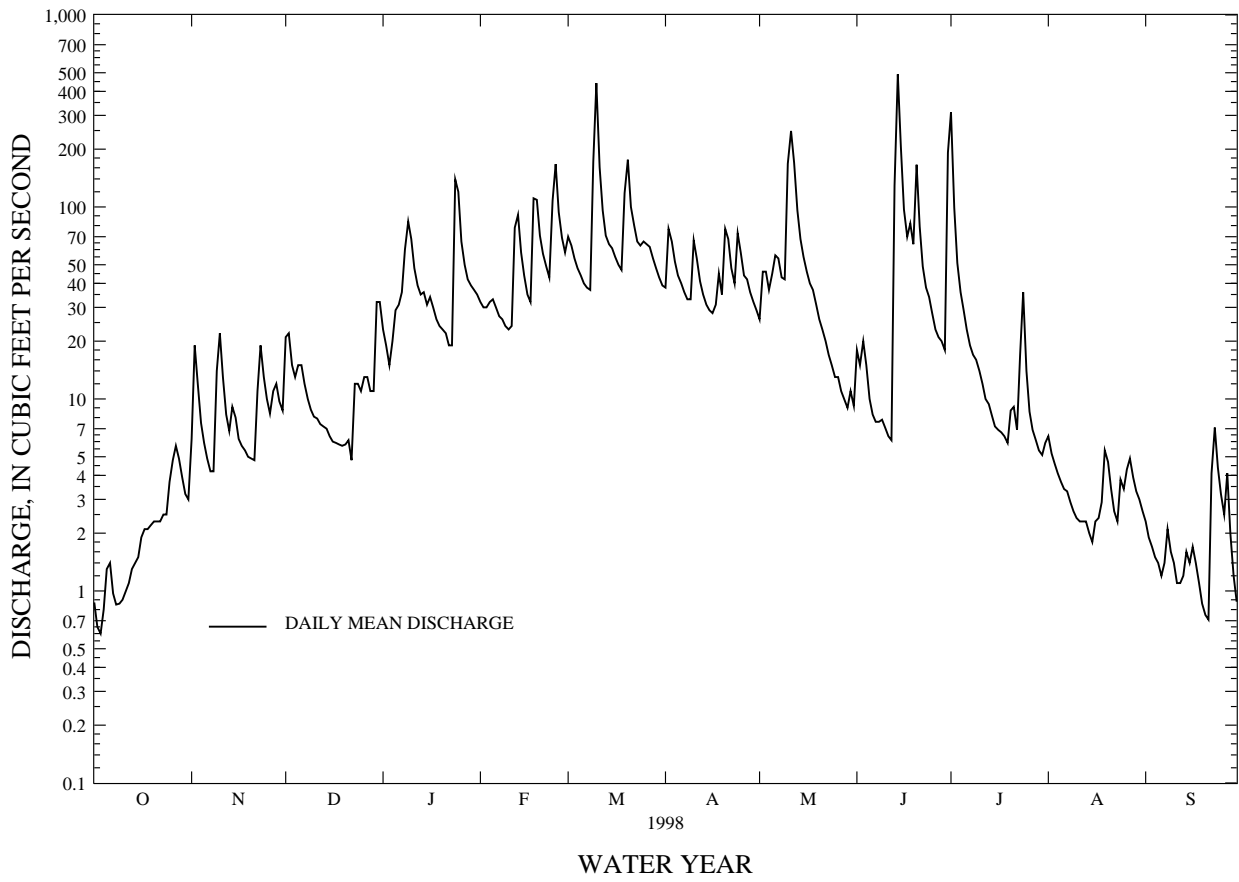
ANNUAL TOTAL	14748.47
ANNUAL MEAN	40.4
HIGHEST DAILY MEAN	298 Oct 21
LOWEST DAILY MEAN	.22 Aug 3
ANNUAL SEVEN-DAY MINIMUM	.38 Jul 29
INSTANTANEOUS PEAK FLOW	458 Oct 20
INSTANTANEOUS PEAK STAGE	6.59 Oct 20
INSTANTANEOUS LOW FLOW	.17 Aug 3
ANNUAL RUNOFF (CFSM)	2.53
ANNUAL RUNOFF (INCHES)	34.29
10 PERCENT EXCEEDS	103
50 PERCENT EXCEEDS	32
90 PERCENT EXCEEDS	.67



BLACKSTONE RIVER BASIN

01111300 NIPMUC RIVER NEAR HARRISVILLE, RI--Continued

NIPMUC RIVER NEAR HARRISVILLE, RI 01111300





Streamflow discharge measurement by boat, Connecticut River at Montague City, Mass.,  
Aug. 16, 1995 (photo by R. S. Socolow).

BLACKSTONE RIVER BASIN

01111500 BRANCH RIVER AT FORESTDALE, RI

LOCATION.--Lat 41°59'47", long 71°33'47", Providence County, Hydrologic Unit 01090003, on left bank 20 ft upstream from abandoned bridge site, 400 ft downstream from milldam at Forestdale, 1 mi east of Slatersville, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--91.2 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September to December 1909 and January 1912 to July 1913 (gage heights only; published as "at Branch Village"), January 1940 to current year.

REVISED RECORDS.--WSP 2101: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 180 ft above sea level, from topographic map. Prior to July 28, 1913, nonrecording gage at site 1 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation by pond upstream. Prior to 1957, greater regulation by mills and reservoirs upstream.

AVERAGE DISCHARGE.--58 years, 176 ft<sup>3</sup>/s, 26.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,470 ft<sup>3</sup>/s, Jan. 25, 1979, gage height, 11.80 ft; maximum gage height, 11.90 ft, Mar. 18, 1968; minimum daily, 5.2 ft<sup>3</sup>/s, Oct. 7, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1886, about 5,800 ft<sup>3</sup>/s, Mar. 19, 1936, by computation of flow over dam 1 mi upstream.

EXTREMES FOR CURRENT YEAR.--Minimum discharge, 2,290 ft<sup>3</sup>/s, Mar. 10, gage height, 7.93 ft; minimum, 11 ft<sup>3</sup>/s, Oct. 11, 12, 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	83	162	156	228	405	164	156	122	1720	58	e41
2	13	244	175	133	215	413	320	221	135	862	61	e37
3	13	180	139	122	211	378	344	269	142	520	52	e34
4	14	130	121	121	218	345	286	231	136	375	46	e30
5	19	109	118	156	228	319	240	244	108	276	43	e27
6	18	72	100	163	218	298	210	292	93	238	39	e25
7	16	56	89	181	203	282	199	338	84	213	38	e25
8	14	56	84	332	177	273	178	280	82	191	36	e27
9	13	117	81	519	152	635	171	260	80	181	34	e26
10	13	204	79	511	142	2000	252	692	77	170	32	e23
11	12	149	79	373	141	1170	270	1480	69	139	30	e21
12	11	108	77	268	297	705	225	1090	63	111	32	e19
13	11	85	79	232	466	472	193	678	254	98	32	e18
14	12	102	76	233	348	414	193	473	1710	88	31	e17
15	12	105	70	208	263	407	182	380	1590	79	29	e18
16	19	93	67	280	245	374	150	327	842	74	28	e20
17	65	99	67	273	237	342	147	293	540	68	37	e20
18	80	98	67	216	486	296	199	290	484	65	52	e17
19	82	89	64	189	617	447	182	222	524	60	64	e18
20	82	79	62	179	452	806	285	198	797	86	63	e16
21	81	76	58	171	378	618	374	185	580	99	49	e15
22	77	121	49	162	344	527	285	171	387	81	41	e23
23	75	166	56	163	313	444	234	156	324	88	36	e26
24	68	140	51	793	525	406	324	138	292	164	42	e24
25	47	119	54	978	990	386	324	127	262	130	34	e20
26	31	110	67	577	733	335	267	117	203	93	42	e18
27	34	124	86	416	539	324	241	109	152	69	e50	e18
28	31	130	93	310	434	317	212	98	141	58	e57	e16
29	28	121	88	271	---	209	186	91	135	51	e58	e14
30	27	116	187	257	---	176	168	90	661	48	e54	e13
31	28	---	227	242	---	163	---	89	---	52	e46	---
TOTAL	1061	3481	2872	9185	9800	14686	7005	9785	11069	6547	1346	666
MEAN	34.2	116	92.6	296	350	474	234	316	369	211	43.4	22.2
MAX	82	244	227	978	990	2000	374	1480	1710	1720	64	41
MIN	11	56	49	121	141	163	147	89	63	48	28	13
CFSM	.38	1.27	1.02	3.25	3.84	5.19	2.56	3.46	4.05	2.32	.48	.24
IN.	.43	1.42	1.17	3.75	4.00	5.99	2.86	3.99	4.51	2.67	.55	.27

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

	1940	1950	1960	1970	1980	1990	1998
MEAN	98.9	159	217	229	243	340	317
MAX	479	472	565	810	581	723	877
(WY)	1956	1956	1973	1979	1970	1972	1987
MIN	15.5	30.4	37.9	40.2	60.5	163	89.4
(WY)	1958	1966	1966	1981	1980	1989	1966

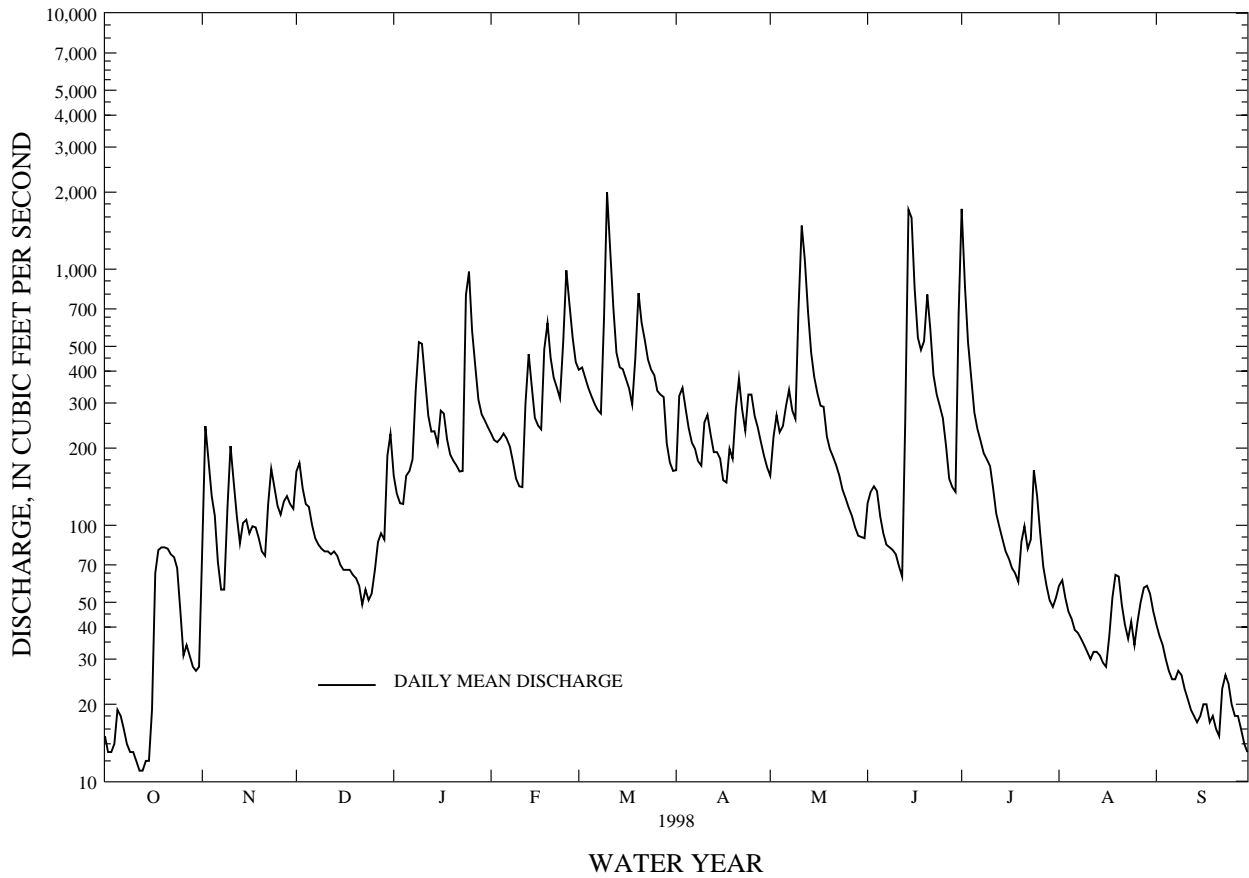
BLACKSTONE RIVER BASIN

01111500 BRANCH RIVER AT FORESTDALE, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1940 - 1998	
ANNUAL TOTAL	53308		77503			
ANNUAL MEAN	146		212		176	
HIGHEST ANNUAL MEAN					261 1984	
LOWEST ANNUAL MEAN					76.5 1966	
HIGHEST DAILY MEAN	955	Apr 20	2000	Mar 10	4020	Jun 6 1982
LOWEST DAILY MEAN	11	Sep 24	11	Oct 12	5.2	Oct 7 1948
ANNUAL SEVEN-DAY MINIMUM	12	Sep 22	12	Oct 9	7.7	Oct 26 1957
INSTANTANEOUS PEAK FLOW			2290	Mar 10	5470	Jan 25 1979
INSTANTANEOUS PEAK STAGE			7.93	Mar 10	11.90	Mar 18 1968
INSTANTANEOUS LOW FLOW			11	Oct 11		
ANNUAL RUNOFF (CFSM)	1.60		2.33		1.93	
ANNUAL RUNOFF (INCHES)	21.74		31.61		26.22	
10 PERCENT EXCEEDS	333		468		380	
50 PERCENT EXCEEDS	98		136		123	
90 PERCENT EXCEEDS	15		25		26	

e Estimated

BRANCH RIVER AT FORESTDALE, RI 01111500



BLACKSTONE RIVER BASIN

01111500 BRANCH RIVER AT FORESTDALE, RI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1968, 1979 to current year.

REMARKS.--Discharge computed by discharge measurements on the day of sampling. Instantaneous records are representative of the cross section while continuous records are based on point samples.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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-AIRE (DEG C) (00020)	TEMPER-AIRE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	
NOV	04...	138	125	7.4	19.0	12.0	15	0.50	755	10.6	99	<10
MAR	17...	--	78	6.8	10.0	4.5	35	--	768	13.6	105	<10
JUN	23...	1115	--	6.6	21.0	21.5	80	.49	756	9.3	104	13
AUG	18...	1300	--	116	30.5	26.0	55	--	750	7.2	90	13

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	E. COLI WHOLE TOTAL UREASE (COL /100 ML) (31633)	HARD-NESS (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)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DISIT FIELD (MG/L AS HCO3) (00453)		
NOV	04...	1.0	12	--	--	--	--	--	--	11		
MAR	17...	<1.0	K6	K0	10	2.8	0.66	9.6	66	1	0.77	2
JUN	23...	1.0	35	36	--	--	--	--	--	--	--	
AUG	18...	1.0	K2000	310	16	4.7	1.0	14	63	2	1.7	--

DATE	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	HY-DROXIDE WATER DIS IT FIELD (MG/L AS OH) (71834)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	
NOV	04...	0	0	9	--	--	--	<1	67	0.031	0.268	
MAR	17...	0	0	2	6.5	14	<0.10	36	2	55	<.010	.149
JUN	23...	0	0	--	--	--	--	3	53	<.010	.085	
AUG	18...	0	0	--	5.7	21	<.10	56	1	75	.015	.215

BLACKSTONE RIVER BASIN

01111500 BRANCH RIVER AT FORESTDALE, RI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 04...	<0.020	--	--	0.33	0.60	0.023	0.031	30	19	<1.0	<1
MAR 17...	.066	0.08	0.17	.24	.39	<.010	<.010	200	166	<1.0	<1
JUN 23...	.022	.03	.38	.40	.49	.014	<.010	190	157	<1.0	<1
AUG 18...	.069	.09	.26	.33	.55	.018	.015	50	--	--	<1
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 04...	<1	13	<1.0	<0.10	<1.0	<1.0	2.2	260	<0.50	25	17
MAR 17...	<1	14	<1.0	<.10	<.10	<1.0	1.2	150	<.50	42	46
JUN 23...	<1	14	<1.0	<1.0	<1.0	<1.0	1.9	510	<1.0	79	73
AUG 18...	--	--	--	<1.0	<1.0	--	--	900	<1.0	88	--
DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHENOLS TOTAL (UG/L) (32730)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 04...	<0.10	<1.0	<1.0	<1	<1.0	4.6	<1.0	--	--	2	71
MAR 17...	<.10	<1.0	<1.0	<1	<.20	10	<1.0	4.9	<1	2	80
JUN 23...	<.10	<1.0	<1.0	<1	<.20	7.3	<1.0	7.8	<1	5	64
AUG 18...	<.10	--	--	--	<.20	--	--	4.7	2	6	41



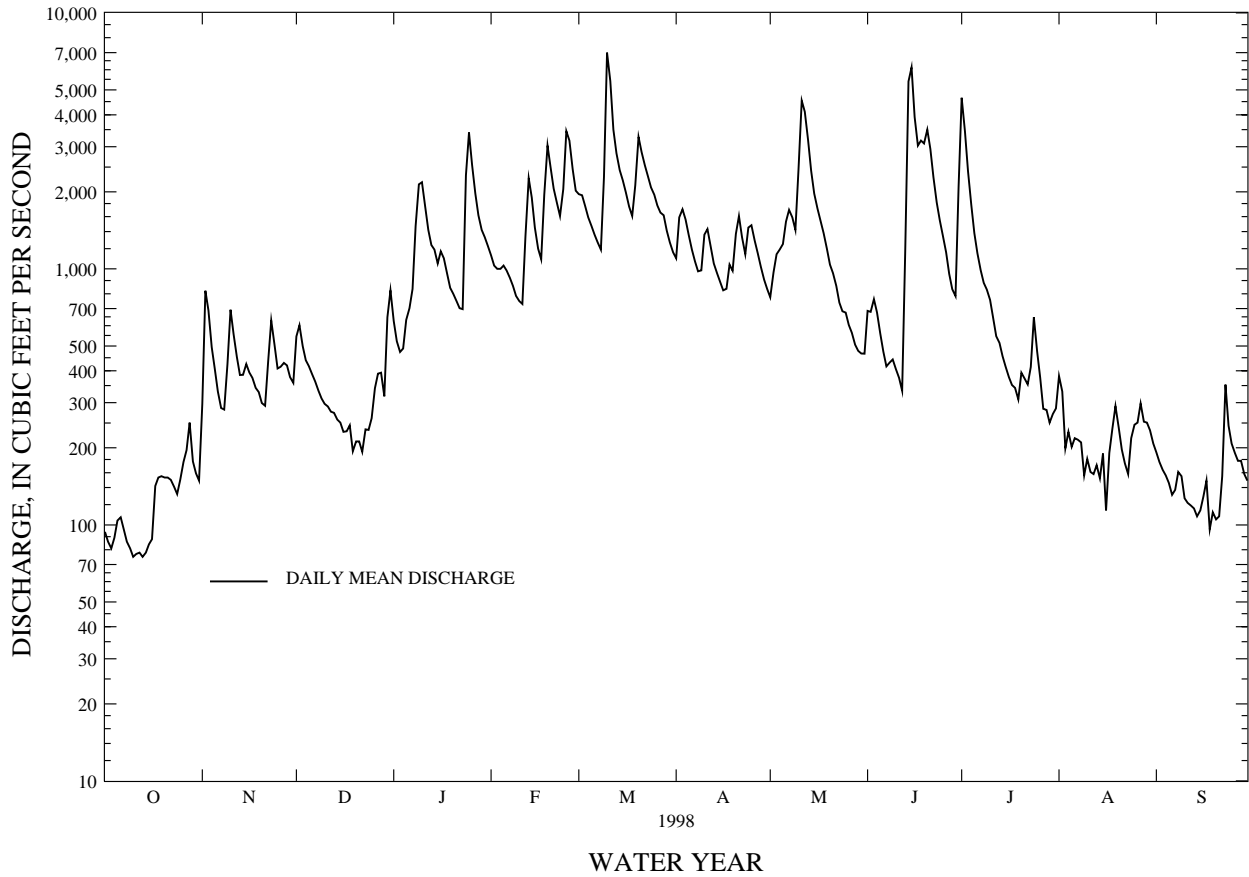


BLACKSTONE RIVER BASIN

01112500 BLACKSTONE RIVER AT WOONSOCKET, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1929 - 1998	
ANNUAL TOTAL	245479		351474			
ANNUAL MEAN	673		963		781	
HIGHEST ANNUAL MEAN					1162	
LOWEST ANNUAL MEAN					345	
HIGHEST DAILY MEAN	3780		7000		25900	
LOWEST DAILY MEAN	74		75		21	
ANNUAL SEVEN-DAY MINIMUM	78		78		64	
INSTANTANEOUS PEAK FLOW			8350		32900	
INSTANTANEOUS PEAK STAGE			10.31		21.80	
INSTANTANEOUS LOW FLOW			64			
10 PERCENT EXCEEDS	1550		2240		1680	
50 PERCENT EXCEEDS	390		604		540	
90 PERCENT EXCEEDS	95		149		163	

BLACKSTONE RIVER AT WOONSOCKET, RI 01112500



BLACKSTONE RIVER BASIN

01112900 BLACKSTONE RIVER AT MANVILLE, RI

LOCATION.--Lat 41°58'18", long 71°28'14", Providence County, Hydrologic Unit 01090003, at Manville Road Bridge,400 ft downstream from milldam at Manville, and 2.5 mi downstream from Woonsocket Sewage Treatment Plant.

PERIOD OF RECORD.--Water years 1970, 1979 to current year.

REMARKS.--Discharge obtained from gage at Woonsocket and inflow from Woonsocket Treatment Plant on the day of sampling. Instantaneous records are representative of the cross section while continuous records are based on point samples.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, SATURATION (PERCENT) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
NOV											
06...	1030	317	6.6	6.0	11.0	45	1.3	764	11.8	105	16
MAR											
19...	1000	235	7.0	3.0	5.5	37	--	757	13.1	103	<10
JUN											
25...	0845	188	7.1	25.5	22.0	65	1.7	756	8.5	98	14
AUG											
20...	0900	374	7.4	14.0	23.0	70	--	762	7.3	85	13

DATE	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	COLIFORM, FECA, UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION PERCENT RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DISIT FIELD (MG/LAS HCO3) (00453)
NOV										
06...	2.0	63	22	--	--	--	--	--	--	23
MAR										
19...	2.0	1500	1100	28	8.5	1.6	30	68	2	1.9
JUN										
25...	2.0	--	--	--	--	--	--	--	--	--
AUG										
20...	1.0	260	210	40	12	2.1	51	71	4	4.6

DATE	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	HYDROXIDE WATER DIS IT FIELD (MG/L AS OH) (71834)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV											
06...	0	0	19	--	--	--	--	4	174	0.067	0.788
MAR											
19...	0	0	14	14	47	0.11	115	7	138	.014	.505
JUN											
25...	0	0	--	--	--	--	--	8	122	.036	.598
AUG											
20...	0	0	--	31	67	.28	193	3	211	.046	1.45

BLACKSTONE RIVER BASIN

01112900 BLACKSTONE RIVER AT MANVILLE, RI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 06...	0.693	0.89	1.1	1.8	2.5	0.648	0.663	70	21	<1.0	2
MAR 19...	.607	.78	.34	.94	1.4	.183	.152	340	62	<1.0	1
JUN 25...	.222	.29	.54	.76	1.4	.210	.138	160	58	<1.0	2
AUG 20...	.876	1.1	.81	1.7	3.1	.872	.769	90	--	--	1

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 06...	2	14	<1.0	0.33	1.1	<1.0	5.1	530	1.1	86	77
MAR 19...	<1	16	<1.0	.29	<1.0	<1.0	3.6	570	.93	74	66
JUN 25...	1	16	<1.0	<1.0	<1.0	<1.0	4.4	940	1.3	120	91
AUG 20...	--	--	--	<1.0	--	--	--	540	<1.0	82	--

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHENOLS TOTAL (UG/L) (32730)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 06...	<0.10	1.3	5.6	<1	<1.0	21	<1.0	--	--	6	81
MAR 19...	<.10	<1.0	3.0	<1	<.20	21	<1.0	5.2	4	7	94
JUN 25...	<.10	<1.0	2.9	<1	<.20	12	<1.0	7.2	3	7	72
AUG 20...	<.10	--	--	--	<.20	--	--	7.5	2	7	89

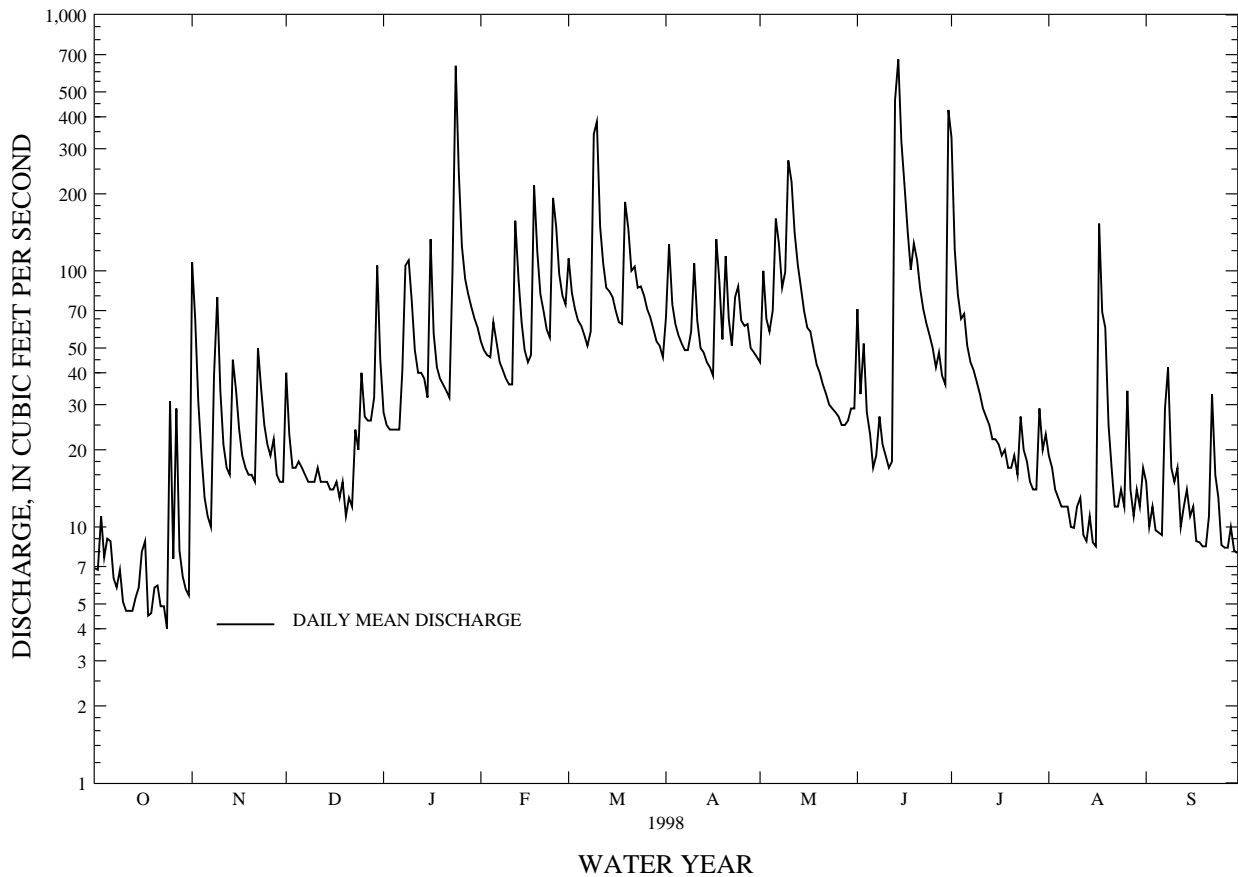


MOSHASSUCK RIVER BASIN

01114000 MOSHASSUCK RIVER AT PROVIDENCE, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1963 - 1998	
ANNUAL TOTAL	12146.3		19657.8			
ANNUAL MEAN	33.3		53.9		40.8	
HIGHEST ANNUAL MEAN					62.5 1973	
LOWEST ANNUAL MEAN					20.2 1981	
HIGHEST DAILY MEAN	221	Jan 25	670	Jun 14	1750	Mar 18 1968
LOWEST DAILY MEAN	4.0	Oct 24	4.0	Oct 24	1.7	Aug 10 1970
ANNUAL SEVEN-DAY MINIMUM	4.9	Oct 18	4.9	Oct 18	2.6	Aug 4 1970
INSTANTANEOUS PEAK FLOW			1240	Jun 30	2390	Mar 18 1968
INSTANTANEOUS PEAK STAGE			5.55	Jun 30	5.81	Jul 30 1976
INSTANTANEOUS LOW FLOW			3.8	Oct 24	1.3	Aug 23 1970
ANNUAL RUNOFF (CFSM)	1.44		2.33		1.77	
ANNUAL RUNOFF (INCHES)	19.56		31.66		23.98	
10 PERCENT EXCEEDS	65		107		81	
50 PERCENT EXCEEDS	24		33		28	
90 PERCENT EXCEEDS	6.9		8.8		8.4	

MOSHASSUCK RIVER AT PROVIDENCE, RI 01114000



WOONASQUATUCKET RIVER BASIN

01114500 WOONASQUATUCKET RIVER AT CENTERDALE, RI

LOCATION.--Lat 41°51'32", long 71°29'16", Providence County, Hydrologic Unit 01090004, on right bank 75 ft downstream from bridge on U.S. Highway 44 at Centerdale and 6.5 mi upstream from mouth.

DRAINAGE AREA.--38.3 mi<sup>2</sup>.

PERIOD OF RECORD.--Discharge: July 1941 to current year.  
Water-quality records: Water years 1955-56.

GAGE.--Water-stage recorder. Elevation of gage is 95 ft above sea level, from topographic map.

REMARKS.--Records fair. Some regulation by reservoirs upstream; regulation greater prior to 1956. Discharge figures prior to 1966 included leakage around station through bypass canal; leakage negligible subsequently.

AVERAGE DISCHARGE.--57 years, 73.9 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,520 ft<sup>3</sup>/s, June 30, 1998, gage height, 7.26, maximum gage height, 7.75 ft, Mar. 18, 1968, from floodmarks; minimum daily, 2.1 ft<sup>3</sup>/s, Aug. 26, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during March 1936, 1,000 ft<sup>3</sup>/s, by computation of flow over dam 0.7 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,520 ft<sup>3</sup>/s, June 30, gage height, 7.26 ft; minimum, 6.1 ft<sup>3</sup>/s, Oct. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	81	94	48	115	198	100	89	84	831	23	27
2	12	104	96	48	109	184	156	131	66	540	21	22
3	14	84	92	53	102	167	131	122	72	321	20	21
4	14	76	87	58	100	150	119	119	62	238	20	22
5	15	50	70	57	106	137	109	138	56	187	20	18
6	14	30	69	57	103	127	103	180	40	144	19	16
7	13	17	69	61	99	119	101	203	39	115	19	20
8	12	27	69	78	97	116	103	169	42	98	19	25
9	13	64	68	85	95	315	111	164	41	88	18	18
10	13	74	66	76	94	648	157	369	38	80	18	16
11	12	95	58	76	93	449	136	488	36	73	19	16
12	12	107	39	86	129	327	117	410	23	67	18	16
13	13	118	30	86	143	254	98	317	212	62	16	16
14	12	125	30	86	128	216	88	241	649	55	15	16
15	12	122	30	89	113	195	80	189	606	48	15	16
16	15	117	25	166	104	169	77	162	490	43	15	20
17	29	111	17	131	101	152	97	143	336	40	44	17
18	29	107	17	114	225	144	101	126	245	39	48	15
19	28	92	17	104	211	262	89	108	302	36	44	16
20	19	76	24	99	176	307	129	98	408	36	25	15
21	8.2	77	35	94	152	259	118	90	338	35	21	15
22	7.8	97	48	90	135	246	112	82	268	34	19	24
23	6.8	95	54	96	132	216	120	77	222	37	18	19
24	7.1	95	52	566	263	201	150	72	176	38	18	15
25	12	76	56	383	306	184	136	69	141	33	17	15
26	7.5	62	51	260	238	162	129	68	119	32	25	16
27	14	63	38	196	192	153	125	65	102	30	32	16
28	18	65	37	163	170	148	111	64	88	22	44	15
29	14	73	39	143	---	127	102	63	81	25	57	14
30	14	78	63	131	---	108	95	64	667	24	55	14
31	14	---	52	123	---	100	---	65	---	26	56	---
TOTAL	437.4	2458	1592	3903	4031	6540	3400	4745	6049	3477	818	531
MEAN	14.1	81.9	51.4	126	144	211	113	153	202	112	26.4	17.7
MAX	29	125	96	566	306	648	157	488	667	831	57	27
MIN	6.8	17	17	48	93	100	77	63	23	22	15	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1998, BY WATER YEAR (WY)

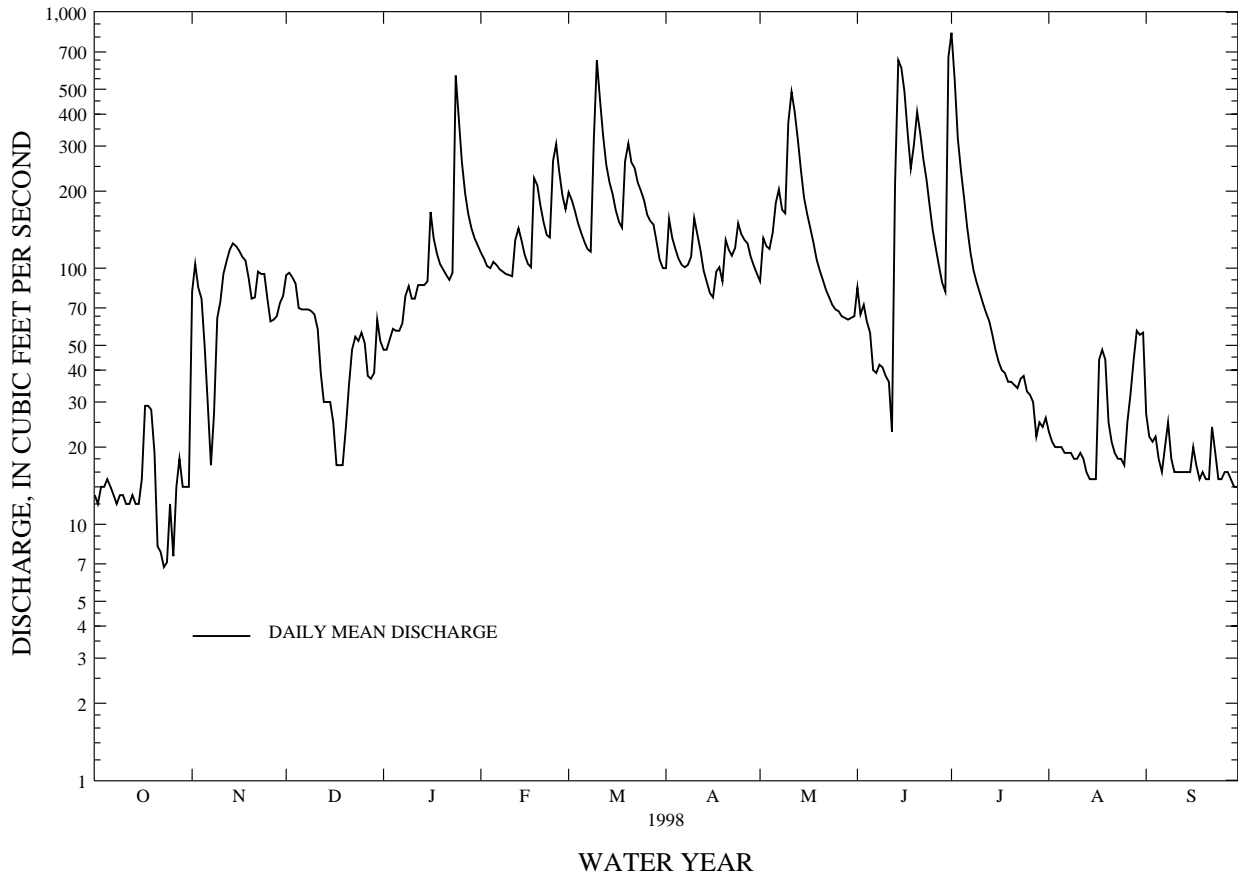
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	39.2	59.4	86.4	93.5	104	141	131	86.9	57.1	32.2	28.9	29.8																																														
MAX	200	208	239	281	254	357	365	191	214	112	83.6	116																																														
(WY)	1956	1956	1973	1979	1970	1983	1983	1967	1982	1998	1955	1954																																														
MIN	10.3	9.90	17.9	20.6	31.2	54.1	44.9	34.1	23.2	12.8	9.21	6.99																																														
(WY)	1958	1958	1966	1966	1944	1944	1966	1986	1965	1993	1963	1980																																														

WOONASQUATUCKET RIVER BASIN

01114500 WOONASQUATUCKET RIVER AT CENTERDALE, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1941 - 1998	
ANNUAL TOTAL	21858.6		37981.4		73.9	
ANNUAL MEAN	59.9		104		119	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					31.5	
HIGHEST DAILY MEAN	310		831		1250	
LOWEST DAILY MEAN	6.8		6.8		2.1	
ANNUAL SEVEN-DAY MINIMUM	9.1		9.1		3.1	
INSTANTANEOUS PEAK FLOW	Oct 23		Oct 23		Mar 18 1968	
INSTANTANEOUS PEAK STAGE	Oct 21		Jun 30		Aug 26 1963	
INSTANTANEOUS LOW FLOW			7.26		Jun 30 1998	
10 PERCENT EXCEEDS	117		6.1		7.75	
50 PERCENT EXCEEDS	48		218		152	
90 PERCENT EXCEEDS	13		77		51	
			15		17	

WOONASQUATUCKET RIVER AT CENTERDALE, RI 01114500





## PAWTUXET RIVER BASIN

01115098 PEEPTOAD BROOK AT ELMDALE ROAD NEAR NORTH SCITUATE, RI

LOCATION.--Lat 41°51'08", long 71°23'35", Providence County, Hydrologic Unit 01090004, on left bank 5 ft downstream from bridge on Elmdale Road, 0.5 mi upstream from regulating reservoir and 1.7 mi northwest of North Scituate.

DRAINAGE AREA.--4.96 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 315 ft above sea level, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--4 years, 11.6 ft<sup>3</sup>/s, 31.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 180 ft<sup>3</sup>/s, Oct. 20, 1996, gage height, 2.40 ft; no flow Sept. 13, 16, 17, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 160 ft<sup>3</sup>/s, July 1, gage height, 2.48 ft; minimum, 0.28 ft<sup>3</sup>/s, Oct. 12-14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.44	4.8	13	12	15	29	14	14	11	99	2.4	1.6
2	.37	15	14	9.2	14	27	34	30	8.2	45	1.9	1.4
3	.38	7.2	12	8.7	13	22	29	31	8.6	29	1.5	1.2
4	.43	4.1	11	11	13	19	20	24	6.8	21	1.3	1.1
5	.45	3.3	9.7	13	14	17	17	28	5.0	19	1.2	1.0
6	.42	3.3	9.1	13	14	16	15	37	3.8	16	1.1	.96
7	.37	3.7	8.2	14	12	15	14	33	3.4	13	1.0	1.0
8	.34	5.9	7.4	31	11	14	13	22	3.5	11	.92	1.5
9	.33	28	6.8	47	11	53	12	24	4.1	10	.85	1.2
10	.33	26	6.4	40	10	113	26	64	3.5	9.1	.80	1.1
11	.31	16	6.2	23	10	54	21	92	2.9	7.5	.78	.96
12	.29	9.7	5.6	17	30	37	16	62	2.6	6.3	.79	.90
13	.28	7.6	5.6	15	35	28	13	43	34	5.6	.79	.84
14	.28	9.5	5.3	14	22	26	12	33	103	4.8	.74	.81
15	.30	9.9	4.9	12	16	25	11	27	67	4.2	.70	.83
16	.32	8.8	4.6	23	13	22	11	22	46	3.7	.68	1.0
17	.34	7.6	4.1	22	13	19	13	20	31	3.5	1.9	.91
18	.34	6.4	4.0	16	39	18	18	18	22	3.3	3.5	.79
19	.34	6.0	3.9	13	42	40	15	15	24	2.9	5.6	.73
20	.35	5.6	3.8	13	28	56	25	13	41	2.6	4.4	.66
21	.36	5.5	3.7	12	22	38	23	12	28	2.4	2.9	.64
22	.36	13	3.3	11	18	33	17	10	20	2.1	2.0	.94
23	.35	17	4.2	11	16	28	17	8.7	17	2.3	1.5	.99
24	.37	15	4.9	96	43	26	31	7.5	15	3.3	1.3	.85
25	.63	12	6.5	67	61	24	26	6.8	13	2.7	1.2	.77
26	1.1	10	10	38	39	22	22	6.8	11	2.2	1.7	.70
27	1.5	11	11	26	29	20	22	5.7	9.7	1.9	1.8	.69
28	1.3	9.6	10	22	24	19	18	5.0	8.3	1.8	1.5	.70
29	1.1	8.8	8.2	20	---	17	16	4.5	7.5	1.8	1.4	.66
30	.95	8.1	26	18	---	16	15	4.6	72	2.3	1.4	.69
31	.89	---	23	17	---	15	---	4.5	---	2.5	1.4	---
TOTAL	15.92	298.4	256.4	704.9	627	908	556	728.1	632.9	341.8	50.95	28.12
MEAN	.51	9.95	8.27	22.7	22.4	29.3	18.5	23.5	21.1	11.0	1.64	.94
MAX	1.5	28	26	96	61	113	34	92	103	99	5.6	1.6
MIN	.28	3.3	3.3	8.7	10	14	11	4.5	2.6	1.8	.68	.64
CFSM	.10	2.01	1.67	4.58	4.51	5.91	3.74	4.74	4.25	2.22	.33	.19
IN.	.12	2.24	1.92	5.29	4.70	6.81	4.17	5.46	4.75	2.56	.38	.21

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

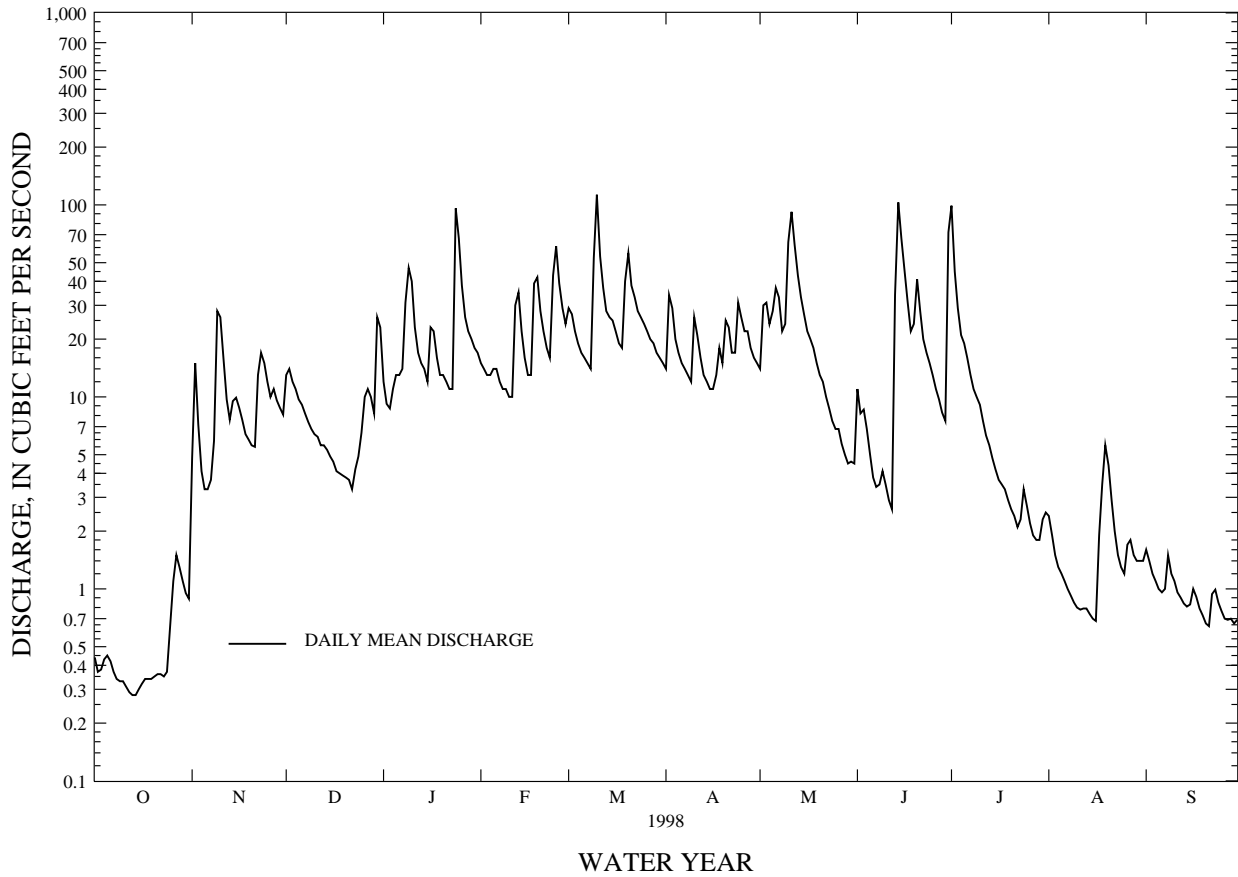
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	5.11	9.99	15.2	19.3	17.8	20.4	21.8	14.5	8.18	3.79	1.15	1.48
MAX	15.7	14.4	33.6	23.9	22.4	29.3	30.2	23.5	21.1	11.0	2.00	4.05
(WY)	1997	1996	1997	1996	1998	1998	1997	1998	1998	1998	1994	1996
MIN	.51	4.59	6.03	13.8	10.9	16.2	10.6	10.2	2.74	.58	.48	.21
(WY)	1998	1995	1996	1995	1995	1995	1995	1997	1997	1995	1995	1995

PAWTUXET RIVER BASIN

01115098 PEEPTOAD BROOK AT ELMDALE ROAD NEAR NORTH SCITUATE, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1994 - 1998	
ANNUAL TOTAL	3401.49	5148.49		
ANNUAL MEAN	9.32	14.1	11.6	
HIGHEST ANNUAL MEAN			14.1	1998
LOWEST ANNUAL MEAN			7.17	1995
HIGHEST DAILY MEAN	67 Mar 15	113 Mar 10	117	Jan 20 1996
LOWEST DAILY MEAN	.18 Aug 3	.28 Oct 13	.00	Sep 16 1995
ANNUAL SEVEN-DAY MINIMUM	.26 Jul 30	.30 Oct 10	.01	Sep 10 1995
INSTANTANEOUS PEAK FLOW		160 Jul 1	180	Oct 20 1996
INSTANTANEOUS PEAK STAGE		2.48 Jul 1	2.48	Jul 1 1998
INSTANTANEOUS LOW FLOW		.28 Oct 12	.00	Sep 13 1995
ANNUAL RUNOFF (CFSM)	1.88	2.84	2.33	
ANNUAL RUNOFF (INCHES)	25.51	38.61	31.64	
10 PERCENT EXCEEDS	21	31	26	
50 PERCENT EXCEEDS	6.8	10	7.2	
90 PERCENT EXCEEDS	.36	.76	.51	

PEEPTOAD BROOK, ELMDALE RD, NEAR NORTH SCITUATE, RI 01115098



## PAWTUXET RIVER BASIN

01115187 PONAGANSET RIVER NEAR SOUTH FOSTER, RI

LOCATION.--Lat 41°49'08", long 71°32'40", Providence County, Hydrologic Unit 01090004, on left bank 5 ft downstream from bridge on Rams Tail Road, 0.3 mi south of South Foster and 0.4 mi upstream from Barden Reservoir.

DRAINAGE AREA.--13.7 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 355 ft above sea level, from topographic map.

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

AVERAGE DISCHARGE.--4 years, 30.4 ft<sup>3</sup>/s, 30.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 672 ft<sup>3</sup>/s, June 30, 1998, gage height, 6.37 ft; no flow part of each day, Sept. 8-13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 672 ft<sup>3</sup>/s, June 30, gage height, 6.37 ft; minimum, 0.40 ft<sup>3</sup>/s, Oct. 12, 13, 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.58	5.3	19	e29	31	77	30	24	43	292	6.0	3.9
2	.52	29	21	22	27	65	91	50	25	128	5.2	3.3
3	.52	17	15	19	26	50	64	48	26	86	4.1	2.9
4	.61	9.1	13	24	26	42	46	39	20	69	3.2	2.4
5	.71	6.2	12	31	28	37	37	59	15	63	2.8	1.9
6	.66	4.7	12	30	26	33	32	63	12	57	2.4	1.6
7	.69	4.2	11	33	23	29	29	60	10	53	2.1	1.3
8	.62	4.4	10	91	22	28	25	50	11	52	1.8	2.4
9	.59	24	9.5	142	20	226	26	56	12	51	1.6	2.9
10	.60	31	9.2	106	19	362	78	236	10	48	1.5	2.6
11	.49	15	9.3	60	20	136	55	235	8.3	44	1.5	2.2
12	.44	10	8.8	42	112	84	37	151	7.7	42	1.6	1.9
13	.47	8.4	8.9	37	106	63	30	90	191	40	1.5	1.6
14	.48	9.0	8.7	37	53	56	26	66	447	38	1.4	1.3
15	.51	9.7	7.9	28	e25	54	24	53	204	36	1.2	1.2
16	.74	8.9	7.6	54	27	50	23	43	115	29	1.1	2.0
17	.80	8.0	7.4	47	25	45	31	41	75	28	3.8	2.3
18	.98	7.1	7.6	34	111	42	54	39	79	13	15	2.1
19	.89	6.7	7.5	28	113	133	37	32	168	6.8	18	1.8
20	.79	6.2	7.6	25	66	166	76	26	228	5.4	10	1.6
21	.75	6.1	7.7	23	48	94	63	23	100	5.2	9.7	1.4
22	.65	18	e6.3	20	37	76	42	20	60	4.7	5.8	2.3
23	.63	29	11	19	32	62	39	18	45	4.8	4.2	4.0
24	.69	17	11	297	209	61	93	15	41	8.5	3.4	3.4
25	1.4	13	14	174	209	60	60	14	52	7.0	3.1	2.7
26	2.5	11	27	86	106	52	44	14	43	5.4	11	2.4
27	3.0	15	27	e56	68	47	44	13	39	4.4	21	2.2
28	2.8	15	22	43	52	42	35	11	38	4.1	17	1.9
29	2.5	12	e17	39	---	37	30	9.9	36	4.0	11	1.6
30	2.3	11	65	36	---	33	26	11	326	4.4	5.7	1.2
31	2.1	---	53	34	---	30	---	13	---	5.2	4.2	---
TOTAL	32.01	371.0	474.0	1746	1667	2372	1327	1622.9	2487.0	1238.9	181.9	66.3
MEAN	1.03	12.4	15.3	56.3	59.5	76.5	44.2	52.4	82.9	40.0	5.87	2.21
MAX	3.0	31	65	297	209	362	93	236	447	292	21	4.0
MIN	.44	4.2	6.3	19	19	28	23	9.9	7.7	4.0	1.1	1.2
CFSM	.08	.90	1.12	4.11	4.35	5.59	3.23	3.82	6.05	2.92	.43	.16
IN.	.09	1.01	1.29	4.74	4.53	6.44	3.60	4.41	6.75	3.36	.49	.18

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

	1994	1995	1996	1997	1998
MEAN	15.5	23.5	43.8	53.7	46.5
MAX	46.9	32.7	103	69.5	59.5
(WY)	1997	1997	1997	1996	1998
MIN	1.03	12.4	15.3	40.8	30.7
(WY)	1998	1998	1998	1995	1995

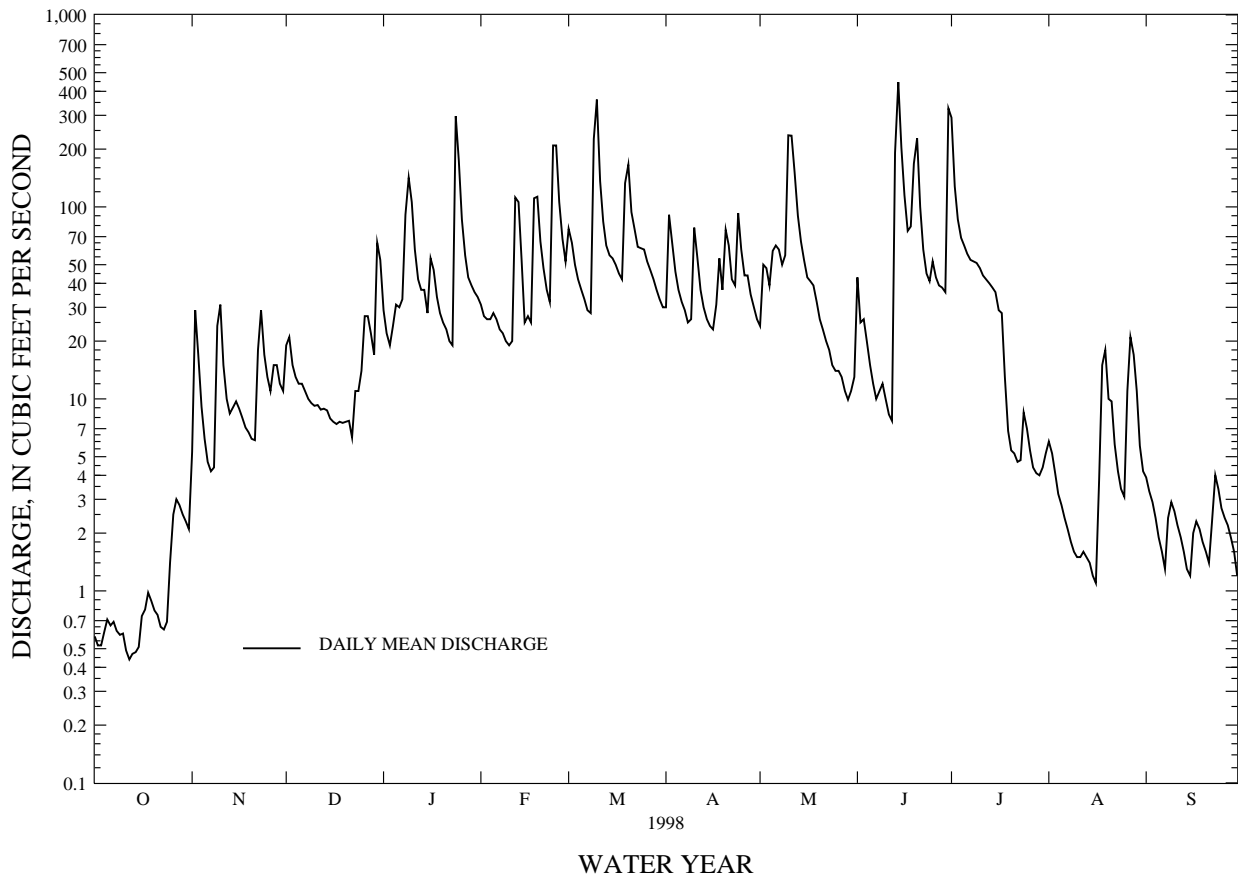
PAWTUXET RIVER BASIN

01115187 PONAGANSET RIVER NEAR SOUTH FOSTER, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1994 - 1998	
ANNUAL TOTAL	8258.16		13586.01			
ANNUAL MEAN	22.6		37.2		30.4	
HIGHEST ANNUAL MEAN					37.2 1998	
LOWEST ANNUAL MEAN					19.3 1995	
HIGHEST DAILY MEAN	203	Mar 15	447	Jun 14	447	Jun 14 1998
LOWEST DAILY MEAN	.29	Aug 2	.44	Oct 12	.04	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	.38	Jul 29	.51	Oct 9	.08	Sep 8 1995
INSTANTANEOUS PEAK FLOW			672	Jun 30	672	Jun 30 1998
INSTANTANEOUS PEAK STAGE			6.37	Jun 30	6.37	Jun 30 1998
INSTANTANEOUS LOW FLOW			.40	Oct 3	.00	Sep 3 1995
ANNUAL RUNOFF (CFSM)	1.65		2.72		2.22	
ANNUAL RUNOFF (INCHES)	22.42		36.89		30.17	
10 PERCENT EXCEEDS	49		85		66	
50 PERCENT EXCEEDS	10		21		18	
90 PERCENT EXCEEDS	.60		1.6		.93	

e Estimated

PONAGANSET RIVER NEAR SOUTH FOSTER, RI 01115187

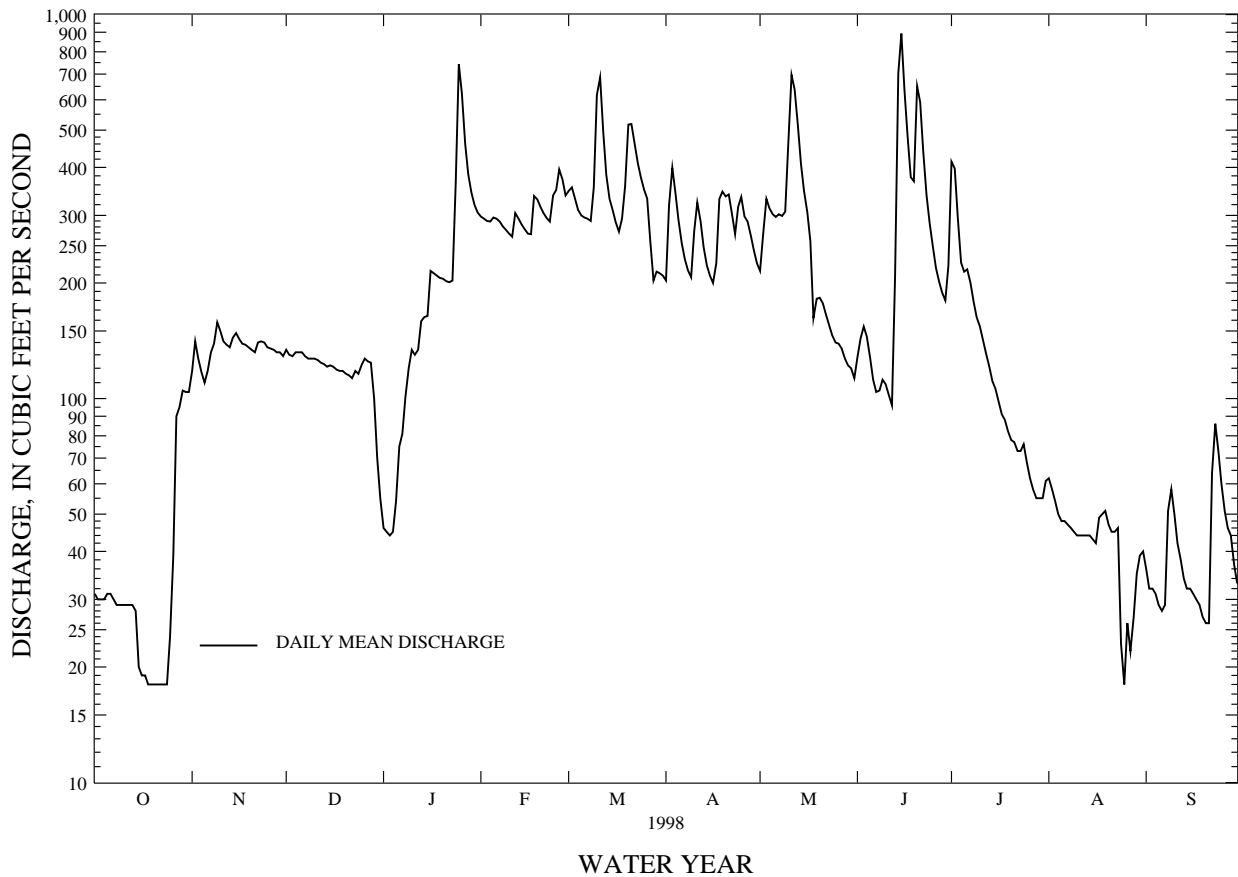




01116000 SOUTH BRANCH PAWTUXET RIVER AT WASHINGTON, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1941 - 1998	
ANNUAL TOTAL	41721.0		67193		131	
ANNUAL MEAN	114		184		202	
HIGHEST ANNUAL MEAN					56.9	
LOWEST ANNUAL MEAN					1973	
HIGHEST DAILY MEAN	370	Apr 20	892	Jun 15	1680	Jun 7 1982
LOWEST DAILY MEAN	18	Oct 18	18	Oct 18	2.8	Aug 27 1944
ANNUAL SEVEN-DAY MINIMUM	18	Oct 18	18	Oct 18	9.3	Jun 23 1980
INSTANTANEOUS PEAK FLOW			986		1980	
INSTANTANEOUS PEAK STAGE			3.76		5.30	
INSTANTANEOUS LOW FLOW			18		Oct 17	
10 PERCENT EXCEEDS	246		352		264	
50 PERCENT EXCEEDS	113		136		101	
90 PERCENT EXCEEDS	31		31		28	

SOUTH BRANCH PAWTUXET RIVER AT WASHINGTON, RI 01116000





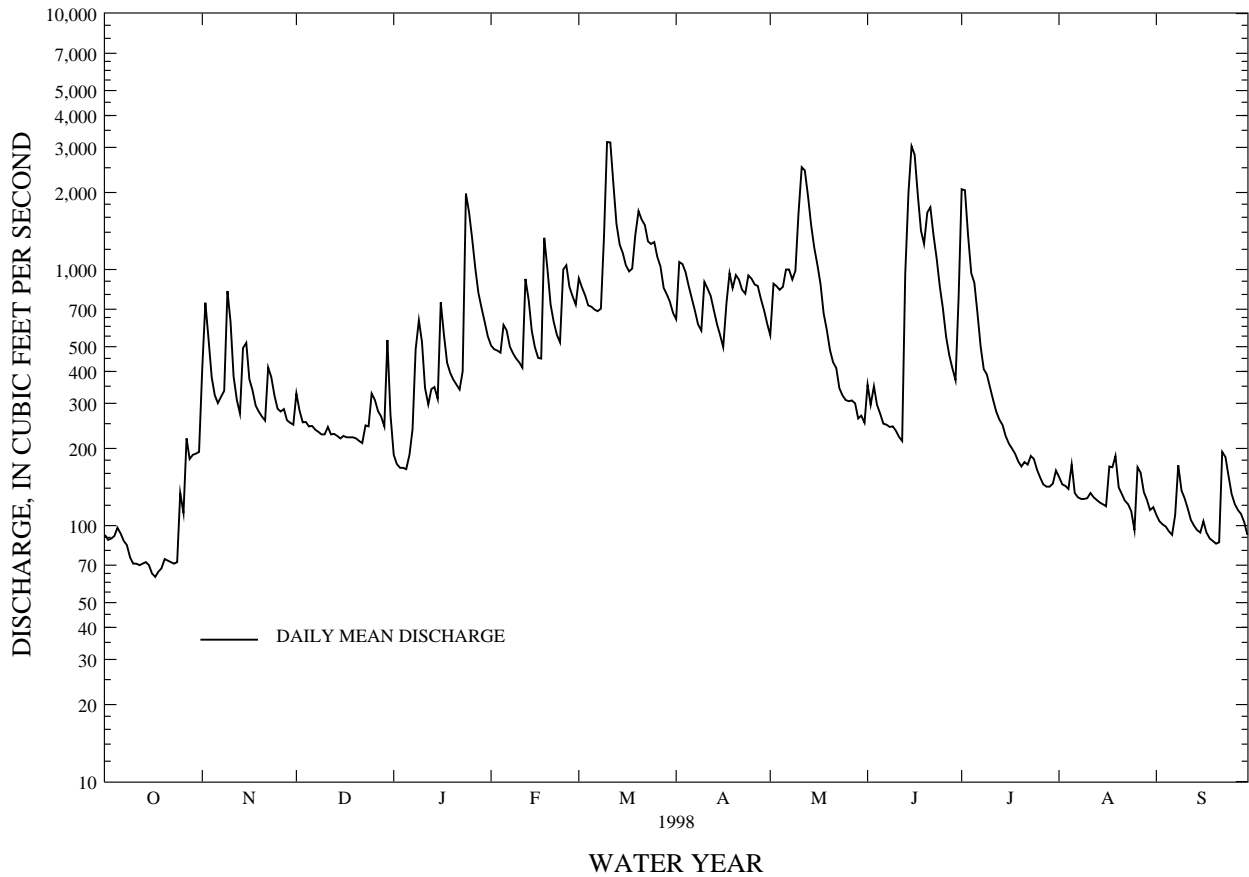
01116500 PAWTUXET RIVER AT CRANSTON, RI--Continued

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1940 - 1998	
ANNUAL TOTAL	130059		193588			
ANNUAL MEAN	356		530		352	
HIGHEST ANNUAL MEAN					595 1973	
LOWEST ANNUAL MEAN					126 1966	
HIGHEST DAILY MEAN	1330	Apr 6	3150	Mar 10	5170	Jun 7 1982
LOWEST DAILY MEAN	42	Aug 3	63	Oct 17	22	Sep 4 1944
ANNUAL SEVEN-DAY MINIMUM	68	Oct 13	68	Oct 13	48	Aug 12 1985
INSTANTANEOUS PEAK FLOW			3360	Mar 11	5440	Jun 7 1982
INSTANTANEOUS PEAK STAGE			11.41	Mar 11	14.50	Jun 7 1982
INSTANTANEOUS LOW FLOW			56	Oct 17		
10 PERCENT EXCEEDS	831		1140		749	
50 PERCENT EXCEEDS	270		323		244	
90 PERCENT EXCEEDS	85		100		101	

(†) Monthend contents, in millions of cubic feet (mcf), of Scituate Reservoir and five smaller reservoirs. Monthend contents on September 30, 1996, 4610 mcf.

(††) Diversions, in cubic feet per second, for municipal supplies unavailable at time of publication. Figures of diversions and monthend contents provided by Providence Water Supply Board.

PAWTUXET RIVER AT CRANSTON, RI 01116500





PAWTUXET RIVER BASIN

01116500 PAWTUXET RIVER AT CRANSTON, RI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1961 to current year.

REMARKS.--Discharge computed by discharge measurements on the day of sampling. Instantaneous records are representative of the cross section while continuous records are based on point samples.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1969 to September 1981.

WATER TEMPERATURE: November 1961 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 693  $\mu$ S/cm, Mar. 11, 1980; minimum, 60  $\mu$ S/cm, Jan. 25, 1979.

WATER TEMPERATURE: Maximum recorded, 30.0°C, July 1, 1964, Aug. 14, 1973; minimum, 0.0°C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

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-A-TURE AIR (DEG C) (00020)	TEMPER-A-TURE WATER (DEG C) (00010)	COLOR (PLAT-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	
NOV												
05...	0900	386	265	6.4	7.1	12.0	60	1.5	768	9.2	84	18
MAR												
18...	0830	--	141	6.3	2.0	5.0	26	--	769	13.2	102	<10
JUN												
24...	0745	--	140	6.7	20.5	20.6	55	.75	759	8.6	96	13
AUG												
19...	0900	--	309	6.9	16.0	22.0	42	--	760	4.8	56	14

DATE	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	HARD-NESS TOTAL (MG/L 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)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)
NOV											
05...	3.0	37	K19	--	--	--	--	--	--	--	16
MAR											
18...	1.0	K17	K8	16	4.8	0.96	18	68	2	1.4	10
JUN											
24...	1.0	310	180	--	--	--	--	--	--	--	--
AUG											
19...	4.0	2200	K1000	30	9.5	1.5	43	73	3	4.5	--

DATE	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	HY-DROXIDE WATER DIS IT FIELD (MG/L AS OH) (71834)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV											
05...	0	0	13	--	--	--	--	<1	142	0.058	0.484
MAR											
18...	0	0	8	9.6	26	0.15	68	2	83	<.010	.342
JUN											
24...	0	0	--	--	--	--	--	4	93	.013	.272
AUG											
19...	--	--	--	23	53	.27	154	<1	177	.246	1.37

PAWTUXET RIVER BASIN

01116500 PAWTUXET RIVER AT CRANSTON, RI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 05...	0.040	0.05	0.80	0.84	1.3	0.159	0.156	100	57	<1.0	<1
MAR 18...	.378	.49	.21	.59	.93	.065	.053	130	78	<1.0	<1
JUN 24...	.314	.40	.32	.63	.90	.055	.024	160	69	<1.0	<1
AUG 19...	.810	1.0	.41	1.2	2.6	.227	.183	70	--	--	<1

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 05...	<1	13	<1.0	0.19	<1.0	<1.0	2.1	580	0.82	130	109
MAR 18...	<1	12	<1.0	<.10	<1.0	<1.0	<1.0	220	<.50	65	66
JUN 24...	<1	13	<1.0	<1.0	<1.0	<1.0	1.7	690	<1.0	140	122
AUG 19...	--	--	--	<1.0	--	--	--	600	<1.0	88	--

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, TOTAL ORGANIC (MG/L AS C) (00680)	PHENOLS TOTAL (UG/L) (32730)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 05...	<0.10	<1.0	3.0	<1	<1.0	10	<1.0	--	--	4	69
MAR 18...	<.10	<1.0	1.4	<1	<.20	10	<1.0	4.6	2	2	75
JUN 24...	<.10	<1.0	2.1	<1	<.20	9.8	<1.0	6.3	<1	8	65
AUG 19...	<.10	--	--	--	<.20	--	--	4.9	2	4	50

PAWTUXET RIVER BASIN

01116617 PAWTUXET RIVER AT PAWTUXET, RI

WATER-QUALITY RECORDS

LOCATION.--Lat 41°46'03", long 71°24'21", Providence County, Hydrologic Unit 01090004, at Warwick Ave. Road Bridge at Pawtuxet, and 3.2 mi downstream from Cranston Sewage Treatment Plant.

PERIOD OF RECORD.--Water years 1979 to current year.

REMARKS.--Discharge computed by discharge measurements on the day of sampling. Instantaneous records are representative of the cross section while continuous records are based on point samples.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, SATURATED (MG/L) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	
NOV	05...	1330	293	6.7	12.5	12.0	55	0.95	769	7.2	66	18
MAR	18...	1200	168	6.9	4.5	5.0	28	--	769	12.0	94	<10
JUN	24...	1130	170	6.9	25.5	21.0	55	1.4	777	7.8	86	10
AUG	19...	1200	296	6.8	21.5	22.0	37	--	761	4.8	M55	11

DATE	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	COLIFORMS, FECA, UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION PERCENT RATIO (00932)	SODIUM, DIS-SOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)		
NOV	05...	4.0	41	33	--	--	--	--	--	19		
MAR	18...	1.0	K7	K1	21	6.3	1.2	20	66	2	1.8	15
JUN	24...	2.0	210	1200	--	--	--	--	--	--	--	--
AUG	19...	5.0	K1500	1300	38	12	1.9	37	65	3	4.5	--

DATE	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	HYDROXIDE WATER DIS IT FIELD (MG/L AS OH) (71834)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV	05...	0	0	16	--	--	--	3	168	0.079	0.787
MAR	18...	0	0	12	11	29	0.18	80	2	<.010	.432
JUN	24...	0	0	--	--	--	--	8	107	.023	.361
AUG	19...	--	--	--	20	51	.28	148	5	.245	1.29

PAWTUXET RIVER BASIN

01116617 PAWTUXET RIVER AT PAWTUXET, RI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)
NOV 05...	0.452	0.58	0.84	1.3	2.1	0.427	0.401	80	44	<1.0	<1
MAR 18...	.625	.80	.27	.90	1.3	.082	.058	130	67	<1.0	<1
JUN 24...	.657	.85	.44	1.1	1.5	.175	.125	140	52	<1.0	<1
AUG 19...	.843	1.1	.56	1.4	2.7	.368	.286	90	--	--	<1
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 05...	<1	16	<1.0	0.15	<1.0	<1.0	2.3	590	0.62	150	129
MAR 18...	<1	14	<1.0	.12	<1.0	<1.0	1.5	270	<.50	84	82
JUN 24...	<1	15	<1.0	<1.0	<1.0	<1.0	2.1	800	<1.0	180	155
AUG 19...	--	--	--	<1.0	--	--	--	700	1.0	130	--
DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHENOLS TOTAL (UG/L) (32730)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 05...	<0.10	<1.0	4.2	<1	<1.0	11	<1.0	--	--	5	68
MAR 18...	<.10	<1.0	2.3	<1	<.20	13	<1.0	4.9	3	2	80
JUN 24...	<.10	<1.0	3.2	<1	<.20	12	<1.0	6.7	1	7	76
AUG 19...	<.10	--	--	--	<.20	--	--	5.8	3	5	64