

APPENDIX B-1

SUMMER 1999: SUMMARY OF STREAMFLOW MEASUREMENTS

Table B-1
Summer 1999: Summary of Streamflow Measurements

River Locations			Discharge (cfs)	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description				
R25	28	School St.	5.36	0.21	25.45	28.70
R19	21.7	Bigelow Rd	15.63	0.50	31.27	33.90
R15	15.9	Cox St HS	12.90	0.29	44.79	43.50
R3	3.1	Rt. 62, Concord	17.94	0.23	76.95	53.00

Tributary Locations			Discharge (cfs)	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description				
T11	29.4	Hop Brook	0.62	0.10	6.27	10.50
T2	3	Nashoba Brook	1.94	11.71	11.71	18.00

APPENDIX B-2

**DRY WEATHER SURVEY – FEBRUARY 8-9, 2000:
SUMMARY OF STREAMFLOW MEASUREMENTS**

Table B-2

Dry Weather Survey-February 8-9, 2000: Summary of Streamflow Measurements

River Locations			Discharge (cfs)	Water Level ft	Stage ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
R28	30.7	Maynard St, Westboro	4.52	0.80	4.50	0.63	7.17	13.50
R24	25.9	River St. Northboro	23.24	2.00	2.90	0.99	23.46	16.70
R21	23.9	Boundary St. Marlboro	39.87	2.20	4.50	0.84	47.34	35.00
R19	21.7	Bigelow Rd. Berlin	46.87	1.90	4.36	0.99	1.58	37.25
R16	17.6	South St., Hudson	50.06	1.90	3.00	0.92	54.25	38.90
R15	15.9	Cox St. Hudson	54.23	2.00	4.22	1.10	49.39	32.00
R12	13.9	Below Gleasondale Dam, Stow	62.12	1.40	4.30	1.99	31.20	40.00
R7	7.4	USGS Gauge, Maynard	100.04	1.90	0.25	1.85	53.98	40.80
R5	6.1	Below Powder Mill Dam	95.43	2.40	13.70	1.10	87.10	52.00
R3	3.1	Rt. 62, Concord	NA	NA	NA	NA	NA	NA

Tributary Locations			Discharge (cfs)	Water Level ft	Stage ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
T11	29.4	Hop Brook, Westboro	5.02	1.60	3.95	0.42	12.02	11.30
T10	26.0	Cold Harbor Brook, Northboro	NA	NA	NA	NA	NA	NA
T8	22.4	North Brook, Berlin	10.73	1.35	3.70	0.36	29.60	26.00
T5	12.9	Ft. Meadow Brook, Hudson	NA	NA	NA	NA	NA	NA
T4	9.4	Elisabeth Brook, Maynard	13.96	0.70	4.00	1.63	8.57	18.05
T2	3.0	Nashoba Brook, Concord	32.69	1.40	5.85	1.25	26.18	32.50

APPENDIX B-3

**WET WEATHER SURVEY – MARCH 16, 2000:
SUMMARY OF STREAMFLOW MEASUREMENTS**

Table B-3

Wet Weather Survey-March 16, 2000: Summary of Streamflow Measurements

River Locations			Discharge (cfs)	Stage ft	Water Level ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
R28	30.7	Maynard St, Westboro	21.12	4.13	1.30	1.64	12.89	16.20

Tributary Locations			Discharge (cfs)	Stage ft	Water Level ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
T11	29.4	Hop Brook, Westboro	21.95	3.62	1.45	2.31	9.49	9.00
T10	26.0	Cold Harbor Brook, Northboro	23.18	5.15	2.40	1.47	15.77	7.60
T9	24.3	Stirrup Brook, Marlborough	8.62	4.47	1.35	0.96	8.98	9.50
T8	22.4	North Brook, Berlin	49.79	2.60	2.15	1.32	37.72	25.80
T7	18.1	Hog Brook, Hudson	9.71	3.68	1.35	1.53	0.00	7.20
T6	17.8	Mill Brook, Hudson	23.52	4.26	1.00	2.2	10.9	15.3
T5	12.9	Ft. Meadow Brook, Hudson	12.95	5.12	1.65	0.97	13.35	2.15
T4	9.4	Elisabeth Brook, Maynard	77.37	3.60	1.20	3.21	24.14	26.80
T2	3.0	Nashoba Brook, Concord	162.78	4.34	2.65	2.55	63.88	31.00
T1	1.3	Spencer Brook, Concord	20.54	3.58	1.80	0.94	21.82	16.80

APPENDIX B-4

**DRY WEATHER SURVEY – MARCH 27, 2000:
SUMMARY OF STREAMFLOW MEASUREMENTS**

Table B-4
Dry Weather Survey-March 27, 2000: Summary of Streamflow Measurements

River Locations			Discharge (cfs)	Water Level ft	Stage ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
R28	30.7	Maynard St, Westboro	15.96	1.10	4.20	1.40	11.36	15.00
R24	25.9	River St. Northboro	80.43	2.10	2.35	2.21	36.35	23.00
R21	23.9	Boundary St. Marlboro	86.56	2.90	3.80	1.22	71.20	32.50
R19	21.7	Bigelow Rd. Berlin	118.28	2.70	3.30	1.27	93.15	44.50
R16	17.6	South St., Hudson	135.71	2.80	2.20	1.52	89.15	41.00
R15	15.9	Cox St. Hudson	112.77	2.90	3.55	1.31	86.33	47.00

APPENDIX B-5

**WET WEATHER SURVEY – MARCH 27, 2000:
SUMMARY OF STREAMFLOW MEASUREMENTS**

Table B-5

Wet Weather Survey-March 27, 2000: Summary of Streamflow Measurements

Tributary Locations			Discharge (cfs)	Water level ft	Stage ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
T11	29.4	Hop Brook, Westboro	16.07	1.40	3.90	1.57	10.23	9.50
T10	26.0	Cold Harbor Brook, Northboro	16.79	2.50	5.35	1.10	15.24	7.80
T9	24.3	Stirrup Brook, Marlborough	7.13	1.40	4.68	0.80	8.93	9.90
T8	22.4	North Brook, Berlin	34.65	1.70	3.05	1.1	32.3	25.2
T7	18.1	Hog Brook, Hudson	8.58	1.55	3.67	0.96	8.94	8.70
T6	17.8	Mill Brook, Hudson	10.33	0.95	4.40	1.30	7.93	14.20
T5	12.9	Ft. Meadow Brook, Hudson	7.91	1.60	5.25	0.64	12.39	10.50
T4	9.4	Elisabeth Brook, Maynard	44.31	1.20	3.67	2.13	20.83	27.00
T2	3.0	Nashoba Brook, Concord	75.99	1.65	5.20	2.41	31.56	22.20
T1	1.3	Spencer Brook, Concord	15.52	1.80	4.36	0.73	21.28	15.40

APPENDIX B-6

SUMMER 2000: SUMMARY OF STREAMFLOW MEASUREMENTS

Table B-6
Summer 2000: Summary of Streamflow Measurements

River Locations			Discharge (cfs)	Water Level ft	Stage ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
R28	30.7	Maynard St, Westboro	0.11	0.30	4.82	0.14	0.79	4.40
R22	25.0	Below Allen St. Impoundment	11.42	0.80		0.75	15.21	30.80
R18	19.2	Chapin Rd. Hudson	23.21	3.10		0.49	47.04	25.00
R15	15.9	Cox St. Hudson	28.35	2.20	4.46	0.44	64.08	55.00
R12	13.9	Below Gleasondale Dam, Stow	25.72	1.40	4.75	0.66	38.94	54.00
R8	8.6	Rt. 117/62 Maynard	34.89	2.00	19.50	0.54	64.21	51.50
R5	6.1	Below Powder Mill Dam	33.55	2.10	14.05	0.52	64.98	51.00
R1	1.6	Park Street, Concord	35.04	1.85	0.30	0.6	58.4	48.0

Tributary Locations			Discharge (cfs)	Water Level ft	Stage ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
T11	29.4	Hop Brook, Westboro	0.89	1.95	4.15	0.15	6.02	5.90
T10	26.0	Cold Harbor Brook, Northboro	0.54	0.60	5.60	0.15	3.61	9.30
T9	24.3	Stirrup Brook, Marlborough	0.23	0.80		0.13	1.81	4.00
T8	22.4	North Brook, Berlin	2.66	0.45	4.23	0.73	3.63	12.30
T7	18.1	Hog Brook, Hudson	0.99	1.00		0.26	3.79	6.10
T6	17.8	Mill Brook, Hudson	0.94	0.25	4.86	0.60	1.58	9.30
T5	12.9	Ft. Meadow Brook, Hudson	1.00	0.80	6.00	0.17	5.86	17.10
T4	9.4	Elisabeth Brook, Maynard	3.89	0.90	4.25	0.26	14.88	24.00
T2	3.0	Nashoba Brook, Concord	8.96	0.80	15.80	0.81	11.10	25.50
T1	1.3	Spencer Brook, Concord	0.75	0.65	4.85	0.2	3.3	8.5

APPENDIX B-7

**WET WEATHER SURVEY – SEPTEMBER 12, 2000:
SUMMARY OF STREAMFLOW MEASUREMENTS**

Table B-7

Wet Weather Survey-September 12, 2000: Summary of Streamflow Measurements

Tributary Locations			Discharge (cfs)	Water Level ft	Stage ft	Ave. Velocity ft/s	Area ft ²	Width ft
Station	Rivermile	Description						
T11	29.4	Hop Brook, Westboro	0.70	0.70	4.21	0.26	2.73	6.50
T10	26.0	Cold Harbor Brook, Northboro	No visible flow	0.00	5.60	0.00	0.00	0.00
T9	24.3	Stirrup Brook, Marlborough	0.07	0.55	5.30	0.10	0.70	2.80
T8	22.4	North Brook, Berlin	2.21	0.40	4.30	0.7	3.2	13.6
T7	18.1	Hog Brook, Hudson	0.63	0.50	4.18	0.62	1.02	2.90
T6	17.8	Mill Brook, Hudson	0.55	0.30	4.87	0.64	0.86	5.70
T5	12.9	Ft. Meadow Brook, Hudson	0.43	0.25	6.12	0.43	0.99	6.10
T4	9.4	Elisabeth Brook, Maynard	4.55	0.65	4.40	0.43	10.56	26.60
T2	3.0	Nashoba Brook, Concord	5.33	0.80	6.27	0.57	9.30	25.20
T1	1.3	Spencer Brook, Concord	0.10	0.00	5.36	0.00	0.00	0.00