

APPENDIX B

WATER QUALITY MONITORING DATA (1977-2016)



Table 1. Sources of Water Quality and Biological Data Regarding Lake Maspenock

Year	Report	Author/Firm	Description	Study Period	# Sample Locations	Sampling Frequency
1979	A Bioengineering Study of Lake Maspenock, Hopkinton, MA	Jason Cortell & Associates	Diagnostic/Feasibility Study	JCA report 1977-1978	4 in-lake (1 deep); outlet, 2 outfalls; 8 tribs.	Weekly ice-free period; monthly during winter
1980	Water Quality Monitoring Datasheet (partial)	MA Department of Environ. Quality and Engineering (MA DEQE)	Periodic water quality monitoring datasheet	MA DEQ&WE sample on 6/4/80	Unknown (partial report), looks to be 4 in-lake (1 deep)	Single Sample
1987	Final report to the Town of Hopkinton on Diagnostic Feasibility Study of North Pond, Hopkinton, MA.	Metcalf and Eddy	Diagnostic/Feasibility Study	M&E report 1984-1987	5 locations: inlet, outlet, 4 in-lake (2 deep), and eastern tributary	Weekly ice-free period; monthly during winter
1993	Bathymetric Map of North Pond and General Information. Westborough, MA.	MA Division of Fish and Wildlife	Bathymetric map, access points, and general fisheries information	MA DFW 1979- 1980	No WQ samples taken	None
2008	2007 Biological Survey of Lake Maspenock (North Pond) Hopkinton, MA	Aquatic Control Technology (ACT)	Letter report with survey and aquatic vegetation management control options	ACT Field survey: 8/22/12	No WQ samples taken	None
2013	2012 Biological Survey of Lake Maspenock (North Pond) Hopkinton, MA	Aquatic Control Technology (ACT)	Aquatic vegetation mapping in support of WPA NOI	ACT Field survey: 11/29/07	No WQ samples taken	None
2011-2016	Water Quality Monitoring Datasheets	Lake Maspenock Protection Association	Yearly (3X) WQ monitoring of in-lake sampling locations.	LMPA monitoring data 2011-2016	3 in-lake locations: north, middle, south	Yearly (3X) WQ monitoring of in-lake sampling locations.

Table 1. Sources of Water Quality and Biological Data

Year	Report	In Situ observations	Nutrient Fractions	WQ Parameters	Bacterial Counts	Other Information
1979	A Bioengineering Study of Lake Maspenock, Hopkinton, MA	Temp. pH, DO, Sp.cond.	Phosphorus (TP); Nitrogen (NH ₃ -N, NO ₃ -N, TKN)	Alk, CO ₂ , Fe, turb., Chl <i>a</i>	T.Coliiform, F.Coliiform, F.Strepto.	Hydrology
1980	Water Quality Monitoring Datasheet (partial)	Temp. pH, DO, Sp.cond.	Phosphorus (TP); Nitrogen (NH ₃ -N, NO ₃ -N, TKN)	Alk, hardness, Cl, Fe, Mn, TSS, TS	T.Coliiform, F.Coliiform,	None
1987	Final report to the Town of Hopkinton on Diagnostic Feasibility Study of North Pond, Hopkinton, MA.	Temp. pH, DO, Sp.cond., SDI	Phosphorus (TP); Nitrogen (NH ₃ -N, NO ₃ -N, TKN)	Alk, Cl, trub., TSS, TDS, Chl <i>a</i> , phytoplankton	T.Coliiform, F.Coliiform,	Hydrology, stormwater samples, sediment samples and testing
1993	Bathymetric Map of North Pond and General Information. Westborough, MA.	None	NA	NA	NA	1980 Bathymetric (depth) map; results of 1979 MA DFW fishery survey
2008	2007 Biological Survey of Lake Maspenock (North Pond) Hopkinton, MA	None	NA	NA	NA	Survey conducted in late November, so species ID and coverage may be
2013	2012 Biological Survey of Lake Maspenock (North Pond) Hopkinton, MA	None	NA	NA	NA	Survey conducted in late August; most current mapping
2011-2016	Water Quality Monitoring Datasheets	Temp. pH, DO (2015)	Total phosphorus	NA	NA	E. coli; did not include beach testing data

Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)

Station and Sample ID				Field Observations									
Year	Station Field ID	Sample ID Number	Type Sample (S,M,D)	Waterbody Type	Date	Depth (m)	Temp (C.)	DO (mg/L)	%DO	Sp. Cond. (uS)	SDT (ft)	SDT To bot.	pH (SU)
1977	Road Cove	3	S	Lake	12/08/77	0.5	1.0			143			6.6
1978	Road Cove	3	S	Lake	03/17/78	0.5	0.5	9.0		195			6.1
1978	Road Cove	3	S	Lake	06/27/78	0.5	21.0	21.0					6.4
1977	Off-beach	2	S	Lake	12/08/77	0.5				178			6.3
1978	Off-beach	2	S	Lake	03/17/78	0.5	0.0	15.0		30			3.6
1978	Off-beach	2	S	Lake	06/27/78	0.5	20.0	20.0					6.4
1977	Outlet	1	S	Lake	12/08/77	0.5	1.0			178			6.3
1978	Outlet	1	S	Lake	03/17/78	0.5	1.0	13.0		118			5.5
1978	Outlet	1	S	Lake	06/27/78	0.5	21.0	21.0					6.6
1980	NP-1	R80431	D?	Lake	06/04/80	?	18.5	2.6		600			7.1
1980	NP-2	R80432	S	Lake	06/04/80	?	21.0	6.3		290			6.9
1980	NP-3	R80433	S	Lake	06/04/80	?	21.0	7.6		170			7.0
1980	NP-4	R80434	S	Lake	06/04/80	?	21.0	8.1		170			7.0
1984	N. basin	2	S	Lake	08/30/84	0.5	24.5	7.7		254			6.3
1984	N. basin	2	S	Lake	09/11/84	0.5	21.4	9.8		201			6.5
1984	N. basin	2	S	Lake	09/27/84	0.5	18.2	9.6		202			7.2
1984	N. basin	2	S	Lake	10/11/84	0.5	13.4	10.6		203			6.7
1984	N. basin	2	S	Lake	10/25/84	0.5	14.9	7.8		207			6.3
1984	N. basin	2	S	Lake	11/19/84								
1984	N. basin	2	S	Lake	12/13/84	0.5	4.1	12.1		212			5.9
1985	N. basin	2	S	Lake	01/17/85								
1985	N. basin	2	S	Lake	02/14/85	0.5	2.0	11.9		258			5.5
1985	N. basin	2	S	Lake	03/07/85		1.6	13.6		227			6.0
1985	N. basin	2	S	Lake	03/28/85	0.2	6.6	9.1		274			5.9
1985	N. basin	2	S	Lake	04/18/85	0.4	10.3	9.2		256			6.8
1985	N. basin	2	S	Lake	05/01/85	0.5	16.3	10.0		194			6.6
1985	N. basin	2	S	Lake	05/16/85	0.5	19.3	9.5		256			9.0
1985	N. basin	2	S	Lake	05/30/85	0.5	20.0	7.0		253			8.5
1985	N. basin	2	S	Lake	06/17/85	0.5	19.3	7.9		263			7.0
1985	N. basin	2	S	Lake	07/02/85	0.5	21.8	8.8		253			7.4
1985	N. basin	2	S	Lake	07/16/85	0.5	22.0	8.9		253			7.6
1985	N. basin	2	S	Lake	07/31/85	0.5	24.8	9.2		258			7.6
1985	N. basin	2	S	Lake	08/13/85	0.3	24.9	8.9		243			7.5

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Station and Sample ID			Water Quality									
Year	Station Field ID	Sample ID Number	Tot. Phos (ug/L)	NH3 (mg/L)	TKN (mg/L)	NO3 (mg/L)	Alk. (mg/L)	Chloride (mg/L)	Iron (mg/L)	TSS (mg/L)	TDS (mg/L)	
1977	Road Cove	3	10	0.07	0.38	0.08	6.9		0.37			
1978	Road Cove	3	10	0.43	0.40	0.14	7.8					
1978	Road Cove	3	10	0.01	0.04	0.01	5.1		0.22			
1977	Off-beach	2	20	0.06	0.35	0.17	2.9		0.20			
1978	Off-beach	2	10	0.43	0.33	0.23	0.0					
1978	Off-beach	2	20	0.60	0.01	0.00	4.7		0.14			
1977	Outlet	1	20	0.07	0.36	0.16	4.9		0.27			
1978	Outlet	1	10	0.45	0.34	0.20	5.1					
1978	Outlet	1	10	0.01	0.01	0.01	4.9		0.12			
1980	NP-1	R80431	120	0.15	0.74	0.00	12.0	175	3.60	4.0		
1980	NP-2	R80432	90	0.10	0.88	0.00	10.0	71	0.81	4.0		
1980	NP-3	R80433	70	0.08	0.56	0.10	6.0	39	0.28	0.0		
1980	NP-4	R80434	50	0.05	0.38	0.10	6.0	40	0.04	0.5		
1984	N. basin	2	10	0.05	0.22		6.8	48		0.0	100	
1984	N. basin	2	10	0.06	0.30		15.0	48		0.0	100	
1984	N. basin	2	12	0.05	0.29		13.0	50		0.0	89	
1984	N. basin	2	750	0.05	0.38		21.0	49		0.0	79	
1984	N. basin	2	10	0.05	0.30		12.0	48		0.0	110	
1984	N. basin	2	20	0.05	0.42		3.2	18		1.6	67	
1984	N. basin	2	85	0.05	0.29		2.0	27		0.0	78	
1985	N. basin	2	21	0.03	0.27		7.7	53		0.0	210	
1985	N. basin	2	10	0.09	0.41		4.9	54		0.0	120	
1985	N. basin	2	10	0.08	0.58		4.7	59		1.0	150	
1985	N. basin	2	13	0.13	0.58		10.0	57		1.0	130	
1985	N. basin	2	33	0.03	0.26		10.0	69		0.5	160	
1985	N. basin	2	10	0.03	0.30		61.0	13		0.5	150	
1985	N. basin	2	32	0.08	0.34		13.0	73		0.5	150	
1985	N. basin	2	14	0.03	0.42		14.0	72		0.5	150	
1985	N. basin	2	5	0.03	0.38		17.0	55		0.5	160	
1985	N. basin	2	5	0.03	1.00		13.0	74		0.5	180	
1985	N. basin	2	32	0.23	0.50		15.0	69		0.5	170	
1985	N. basin	2	5	0.06	2.50		14.0	64		1.2	150	
1985	N. basin	2	17	0.19	0.56		15.0	65		3.2	160	

Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)

Station and Sample ID			Biological				
Year	Station Field ID	Sample ID Number	Total Coliform (#/100 ml)	Fecal Coliform (#/100 ml)	E. coli (#/100 ml)	Chl <u>a</u> (ug/L)	
1977	Road Cove	3	280	26			
1978	Road Cove	3	260	18			
1978	Road Cove	3	690	150			
1977	Off-beach	2	31	0		0.03	
1978	Off-beach	2	0	0			
1978	Off-beach	2	196	4			
1977	Outlet	1	100	0		0.37	
1978	Outlet	1	64	0		0.04	
1978	Outlet	1	1363	300			
1980	NP-1	R80431	500	200			
1980	NP-2	R80432	700	250			
1980	NP-3	R80433	300	100			
1980	NP-4	R80434	60	20			
1984	N. basin	2	200	28		0.39	
1984	N. basin	2	100	12		0.73	
1984	N. basin	2	10	2		1.70	
1984	N. basin	2	170	6		0.31	
1984	N. basin	2	37000	22		2.10	
1984	N. basin	2	130	2		9.80	
1984	N. basin	2	0	0		4.20	
1985	N. basin	2	0	0		7.90	
1985	N. basin	2	370	12		2.70	
1985	N. basin	2	10	2		0.54	
1985	N. basin	2	10	2		1.10	
1985	N. basin	2	10	1		0.27	
1985	N. basin	2	40	1		0.66	
1985	N. basin	2	70	1		1.90	
1985	N. basin	2	5	2		1.60	
1985	N. basin	2	8600	940		9.00	
1985	N. basin	2	130	2		1.60	
1985	N. basin	2	60	4		1.40	
1985	N. basin	2	400	2		9.00	
1985	N. basin	2	500	1		9.50	

**Table 2. Lake Miaspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Waterbody			Temp (C)	DO (mg/L)	%DO	Sp. Cond. (uS)	SDT (ft)	SDT To bot.	pH (SU)
			Sample (S,M,D)	Type	Date							
1984	S.basin	4	S	Lake	08/30/84	24.5	7.8	258			6.0	
1984	S.basin	4	S	Lake	09/11/84	21.9	12.0	195			6.4	
1984	S.basin	4	S	Lake	09/27/84	18.8	8.1	192			6.7	
1984	S.basin	4	S	Lake	10/11/84	13.8	9.9	193			6.6	
1984	S.basin	4	S	Lake	10/25/84	14.6	8.1	197			6.3	
1984	S.basin	4	S	Lake	11/19/84	7.3	9.6	194			6.8	
1984	S.basin	4	S	Lake	12/13/84	3.2	11.7	175			6.0	
1985	S.basin	4	S	Lake	01/17/85							
1985	S.basin	4	S	Lake	02/14/85	0.7	11.3	240			6.4	
1985	S.basin	4	S	Lake	03/07/85	2.5	12.1	228			5.7	
1985	S.basin	4	S	Lake	03/28/85	6.4	9.4	233			6.3	
1985	S.basin	4	S	Lake	04/18/85	10.3	9.6	223			6.8	
1985	S.basin	4	S	Lake	05/01/85	15.7	8.9	151			6.5	
1985	S.basin	4	S	Lake	05/16/85	18.3	8.5	228			7.6	
1985	S.basin	4	S	Lake	05/30/85	19.8	8.6	228			6.8	
1985	S.basin	4	S	Lake	06/17/85	19.7	7.8	240			6.8	
1985	S.basin	4	S	Lake	07/02/85	21.1	8.5	241			7.2	
1985	S.basin	4	S	Lake	07/16/85	22.0	8.5	241			6.9	
1985	S.basin	4	S	Lake	07/31/85	25.0	8.9	246			6.5	
1985	S.basin	4	S	Lake	08/13/85	24.9	7.4	222			6.4	
1984	S.basin	4	D	Lake	08/30/84	22.1	1.0	263			4.8	
1984	S.basin	4	D	Lake	09/11/84	20.8	7.3	195			6.5	
1984	S.basin	4	D	Lake	09/27/84	18.5	8.3	187			6.6	
1984	S.basin	4	D	Lake	10/11/84	13.4	8.8	189			6.5	
1984	S.basin	4	D	Lake	10/25/84	14.2	7.4	197			6.1	
1984	S.basin	4	D	Lake	11/19/84	7.6	9.2	175			6.8	
1984	S.basin	4	D	Lake	12/13/84	3.1	11.6	176			5.9	
1985	S.basin	4	D	Lake	01/17/85	3.4	12.5	125			7.3	
1985	S.basin	4	D	Lake	02/14/85	4.1	5.5	298			5.5	
1985	S.basin	4	D	Lake	03/07/85	2.8	11.9	228			5.6	
1985	S.basin	4	D	Lake	03/28/85	5.6	9.4	233			6.2	
1985	S.basin	4	D	Lake	04/18/85	10.1		221			6.7	
1985	S.basin	4	D	Lake	05/01/85	14.0	8.8	144			6.4	
1985	S.basin	4	D	Lake	05/16/85	15.3	7.8	224			7.4	
1985	S.basin	4	D	Lake	05/30/85	16.4	7.7	221			6.4	

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Tot. Phos (ug/L)	NH3 (mg/L)	TKN (mg/L)	NO3 (mg/L)	Alk. (mg/L)	Chloride (mg/L)	Iron (mg/L)	TSS (mg/L)	TDS (mg/L)
1984	S.basin	4	10	0.05	0.18		6.3	44		2.0	110
1984	S.basin	4	10	0.06	0.29		14.0	44		0.0	97
1984	S.basin	4	17	0.05	0.30		13.0	47		0.0	88
1984	S.basin	4	15	0.05	0.23					0.0	8
1984	S.basin	4	10	0.05	0.26		12.0	65		0.0	110
1984	S.basin	4	12	0.05	0.48		9.5	47		6.8	120
1984	S.basin	4	17	0.04	0.44		13.0	45		0.0	120
1985	S.basin	4	19	0.02	0.27		8.0	53		0.0	220
1985	S.basin	4	10	0.05	0.29		5.9	51		0.0	120
1985	S.basin	4	10	0.49	0.53		16.0	46		1.1	100
1985	S.basin	4	53	0.22	0.46		10.0	49		1.0	110
1985	S.basin	4	5	0.03	0.26		14.0	58		0.5	140
1985	S.basin	4	10	0.06	0.10		58.0	13		1.1	180
1985	S.basin	4	16	0.07	0.33		12.0	62		0.5	190
1985	S.basin	4	5	0.03	0.39		12.0	62		0.5	140
1985	S.basin	4	5	0.02	0.44		12.0	60		0.5	140
1985	S.basin	4	5	0.03	1.10		13.0	67		0.5	170
1985	S.basin	4	32	0.03	0.50		15.0	72		1.1	170
1985	S.basin	4	10	0.03	1.40		14.0	61		1.5	140
1985	S.basin	4	24	0.03	1.80		15.0	60		21.0	170
1984	S.basin	4	180	0.05	0.92		7.4	47		1.0	83
1984	S.basin	4	10	0.05	0.31		15.0	47		0.0	97
1984	S.basin	4	21	0.05	0.28		13.0	46		0.0	100
1984	S.basin	4	18	0.05	0.30		20.0	46		0.0	8
1984	S.basin	4	10	0.05	0.28		12.0	23		0.0	110
1984	S.basin	4	17	0.16	0.91		11.0	43		2.0	100
1984	S.basin	4	15	0.03	0.85		11.0	45		0.0	120
1985	S.basin	4	19	0.06	0.25		8.0	53		0.0	210
1985	S.basin	4	10	0.20	0.24		7.1	59		0.0	140
1985	S.basin	4	15	0.11	0.62		15.0	47		1.0	130
1985	S.basin	4	10	0.03	0.14		10.0	52		1.1	110
1985	S.basin	4	5	0.03	0.28		13.0	60		1.1	150
1985	S.basin	4	10	0.04	0.32		11.0	57		0.5	140
1985	S.basin	4	17	0.03	0.35		12.0	61		0.5	140
1985	S.basin	4	5	0.06	0.36		12.0	62		0.5	140

Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)

Year	Station Field ID	Sample ID Number	Waterbody			Temp (C)	DO (mg/L)	%DO	Sp. Cond. (uS)	SDT (ft)	SDT To bot.	pH (SU)
			Type	Sample Type (S,M,D)	Type							
1985	S. basin	4	D	Lake	06/17/85	19.1	6.3	241			6.5	
1985	S. basin	4	D	Lake	07/02/85	19.0	7.9	239			6.8	
1985	S. basin	4	D	Lake	07/16/85	19.9	8.0	239			6.3	
1985	S. basin	4	D	Lake	07/31/85	23.8	7.8	248			6.6	
1985	S. basin	4	D	Lake	08/13/85	24.7	7.2	220			6.3	
1984	Outlet	5	S	Lake	08/30/84	23.2	7.0	233			5.8	
1984	Outlet	5	S	Lake	09/11/84	20.3	8.4	196			5.9	
1984	Outlet	5	S	Lake	09/27/84	17.4	8.6	197			6.8	
1984	Outlet	5	S	Lake	10/11/84	12.7	9.3	196			6.4	
1984	Outlet	5	S	Lake	10/25/84	12.6	7.8	195			5.9	
1984	Outlet	5	S	Lake	11/19/84	7.0	9.8	190			6.7	
1984	Outlet	5	S	Lake	12/13/84	3.8	11.9	161			5.7	
1985	Outlet	5	S	Lake	01/17/85	0.2	12.5	183			6.8	
1985	Outlet	5	S	Lake	02/14/85	0.7	12.7	205			5.5	
1985	Outlet	5	S	Lake	03/07/85	-0.1	13.0	122			5.7	
1985	Outlet	5	S	Lake	03/28/85	0.4	7.0	210			6.1	
1985	Outlet	5	S	Lake	04/18/85	10.1	8.4	224			6.7	
1985	Outlet	5	S	Lake	05/01/85	14.7	9.3	206			6.0	
1985	Outlet	5	S	Lake	05/16/85	18.2	8.3	218			7.6	
1985	Outlet	5	S	Lake	05/30/85	19.3	8.5	230			6.8	
1985	Outlet	5	S	Lake	06/17/85	19.1	6.4	256			7.0	
1985	Outlet	5	S	Lake	07/02/85	17.8	7.2	233			6.9	
1985	Outlet	5	S	Lake	07/16/85	23.5	8.3	242			7.7	
1985	Outlet	5	S	Lake	07/31/85	22.6	7.6	247			6.4	
1985	Outlet	5	S	Lake	08/13/85	22.5	7.7	244			6.3	

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Tot. Phos (ug/L)	NH3 (mg/L)	TKN (mg/L)	NO3 (mg/L)	Alk. (mg/L)	Chloride (mg/L)	Iron (mg/L)	TSS (mg/L)	TDS (mg/L)
1985	S.basin	4	5	0.03	0.44		12.0	61		0.5	150
1985	S.basin	4	5	0.03	0.56		13.0	64		0.5	170
1985	S.basin	4	27	0.03	0.48		14.0	64		0.5	160
1985	S.basin	4	5	0.03	0.49		13.0	61		1.5	140
1985	S.basin	4	12	0.03	0.95		17.0	60		1.5	170
1984	Outlet	5	10	0.05	0.18		5.8	45		1.2	99.0
1984	Outlet	5	10	0.05	0.26		16.0	45		1.2	95.0
1984	Outlet	5	13	0.05	0.23		11.0	47		0	93.0
1984	Outlet	5	60				15.0	44		0	79.0
1984	Outlet	5	10	0.05	0.27		12.0	42		0	110.0
1984	Outlet	5	13	0.05	0.42		8.9	42		14	93.0
1984	Outlet	5	22	0.09	0.35		9.0	36		0	110.0
1985	Outlet	5	15	0.10	0.25		8.0	50		0	
1985	Outlet	5	10	0.05	0.35		3.0	45		1.7	170.0
1985	Outlet	5	10	0.30	0.47		13.0	65		1	130.0
1985	Outlet	5	11	0.05	0.06		5.6	44		1	110.0
1985	Outlet	5									
1985	Outlet	5	12	0.03	0.05		13.0	55		1.1	140.0
1985	Outlet	5	15	0.04	0.35		12.0	59		0.5	140.0
1985	Outlet	5	5	0.03	0.43		12.0	62		0.5	140.0
1985	Outlet	5	5	0.03	0.66		14.0	64		0.5	140.0
1985	Outlet	5	5	0.03	0.67		13.0	69		1.1	160.0
1985	Outlet	5	28	0.03	0.39		16.0	62		0.5	160.0
1985	Outlet	5	5	0.03	2.80		15.0	60		2.5	140.0
1985	Outlet	5	12	0.03	0.95		16.0	63		0.5	125.0

Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)

Year	Station Field ID	Sample ID Number	Total Coliform (#/100 ml)	Fecal Coliform (#/100 ml)	E. coli (#/100 ml)	Chl <u>a</u> (ug/L)
1985	S.basin	4				
1985	S.basin	4				
1985	S.basin	4				
1985	S.basin	4				
1985	S.basin	4				
1984	Outlet	5	80	46		
1984	Outlet	5	90	12		
1984	Outlet	5	50	16		
1984	Outlet	5	100	8		
1984	Outlet	5	70	6		
1984	Outlet	5	1500	10		
1984	Outlet	5	220	2		
1985	Outlet	5	210	18		
1985	Outlet	5	1100	15		
1985	Outlet	5	420	6		
1985	Outlet	5	560	2		
1985	Outlet	5				
1985	Outlet	5	260	4		
1985	Outlet	5	1100	13		
1985	Outlet	5	230	20		
1985	Outlet	5	180	12		
1985	Outlet	5	480	70		
1985	Outlet	5	450	56		
1985	Outlet	5	830	84		
1985	Outlet	5	420	48		

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Waterbody			Temp (C)	DO (mg/L)	%DO	Sp. Cond. (uS)	SDT (ft)	SDT To bot.	pH (SU)
			Type	Sample (S,M,D)	Date							
2011	North		S	Lake	04/29/11	0.2	17.2		7.0	yes	6.8	
2011	Middle		S	Lake	04/29/11	0.2	15.6		8.0		6.8	
2011	South		S	Lake	04/29/11	0.2	15.6		8.0		6.8	
2011	North		S	Lake	08/19/11	0.2	23.9		8.0		7.1	
2011	Middle		S	Lake	08/19/11	0.2	23.9		8.0		6.8	
2011	South		S	Lake	08/19/11	0.2	23.9		9.0		6.7	
2011	North		S	Lake	11/21/11	0.2	10.0		4.5	yes	7.1	
2011	Middle		S	Lake	11/21/11	0.2	10.0		9.0		7.0	
2011	South		S	Lake	11/21/11	0.2	10.0		10.0		6.9	
2012	North		S	Lake	05/21/12	0.2	20.0		7.0	yes	7.5	
2012	Middle		S	Lake	05/21/12	0.2	20.0		9.0		7.0	
2012	South		S	Lake	05/21/12	0.2	20.0		10.0		6.8	
2012	North		S	Lake	08/20/12	0.2	24.4		7.0		6.9	
2012	Middle		S	Lake	08/20/12	0.2	24.4		8.0		6.8	
2012	South		S	Lake	08/20/12	0.2	24.4		8.0		6.8	
2012	North		S	Lake	11/12/12	0.2	10.0		6.0	yes	6.7	
2012	Middle		S	Lake	11/12/12	0.2	10.0		8.0		6.8	
2012	South		S	Lake	11/12/12	0.2	10.0		9.0		6.7	
2013	North		S	Lake	05/07/13	0.2	17.2		9.0		6.9	
2013	Middle		S	Lake	05/07/13	0.2	16.7		9.0		6.9	
2013	South		S	Lake	05/07/13	0.2	16.7		9.0		6.9	
2013	North		S	Lake	09/11/13	0.2	20.0		9.0	yes	6.8	
2013	Middle		S	Lake	09/11/13	0.2	20.0		9.0		6.6	
2013	South		S	Lake	09/11/13	0.2	20.0		9.0		6.6	
2014	North		S	Lake	06/02/14	0.2	20.0		7.0	yes	7.0	
2014	Middle		S	Lake	06/02/14	0.2	20.0		12.0		6.8	
2014	South		S	Lake	06/02/14	0.2	20.0		12.0		6.7	
2014	North		S	Lake	09/10/14	0.2	21.7		7.0	yes	6.6	
2014	Middle		S	Lake	09/10/14	0.2	21.7		11.0		6.6	
2014	South		S	Lake	09/10/14	0.2	21.7		11.0		6.6	
2014	North		S	Lake	11/14/14	0.2	11.1		5.0	yes	6.6	
2014	Middle		S	Lake	11/14/14	0.2	11.1		12.0		6.7	
2014	South		S	Lake	11/14/14	0.2	11.1		12.0		6.7	

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Tot. Phos (ug/L)	NH3 (mg/L)	TKN (mg/L)	NO3 (mg/L)	Alk. (mg/L)	Chloride (mg/L)	Iron (mg/L)	TSS (mg/L)	TDS (mg/L)
2011	North		14								
2011	Middle		10								
2011	South		11								
2011	North		5								
2011	Middle		5								
2011	South		5								
2011	North		5								
2011	Middle		5								
2011	South		17								
2012	North		10								
2012	Middle		510								
2012	South		10								
2012	North		16								
2012	Middle		11								
2012	South		13								
2012	North		15								
2012	Middle		48								
2012	South		10								
2013	North		10								
2013	Middle		10								
2013	South		10								
2013	North		20								
2013	Middle		20								
2013	South		20								
2014	North		5								
2014	Middle		5								
2014	South		5								
2014	North		5								
2014	Middle		5								
2014	South		5								
2014	North		5								
2014	Middle		5								
2014	South		5								

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Total Coliform (#/100 ml)	Fecal Coliform (#/100 ml)	E. coli (#/100 ml)	Chl a (ug/L)
2011	North				0	
2011	Middle				20	
2011	South				0	
2011	North				0	
2011	Middle				20	
2011	South				0	
2011	North				0	
2011	Middle				0	
2011	South				0	
2012	North				0	
2012	Middle				10	
2012	South				20	
2012	North				20	
2012	Middle				10	
2012	South				10	
2012	North				0	
2012	Middle				0	
2012	South				0	
2013	North				0	
2013	Middle				0	
2013	South				0	
2013	North				0	
2013	Middle				4	
2013	South				3	
2014	North				3	
2014	Middle				6	
2014	South				1	
2014	North				2	
2014	Middle				0	
2014	South				4	
2014	North				5	
2014	Middle				5	
2014	South				5	

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Waterbody			Temp (C)	DO (mg/L)	%DO	Sp. Cond. (uS)	SDT (ft)	SDT To bot.	pH (SU)
			Type	Sample (S,M,D)	Type							
2015	North		S	Lake	06/17/15	0.2	8.0					6.5
2015	Middle		S	Lake	06/17/15	0.2	8.1					6.7
2015	South		S	Lake	06/17/15	0.2	8.5					6.9
2015	North		S	Lake	09/15/15	0.2	7.9					7.0
2015	Middle		S	Lake	09/15/15	0.2	7.1					6.9
2015	South		S	Lake	09/15/15	0.2	7.8					6.8
2016	North		S	Lake	08/09/16	0.2						7.5
2016	Middle		S	Lake	08/09/16	0.2						7.2
2016	South		S	Lake	08/09/16	0.2						7.1
2016	North		S	Lake	11/xx/16	0.2						
2016	Middle		S	Lake	11/xx/16	0.2						
2016	South		S	Lake	11/xx/16	0.2						

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Tot Phos (ug/L)	NH3 (mg/L)	TKN (mg/L)	NO3 (mg/L)	Alk. (mg/L)	Chloride (mg/L)	Iron (mg/L)	TSS (mg/L)	TDS (mg/L)
2015	North		12								
2015	Middle		5								
2015	South		5								
2015	North		5								
2015	Middle		5								
2015	South		12								
2016	North		5								
2016	Middle		5								
2016	South		5								
2016	North										
2016	Middle										
2016	South										

**Table 2. Lake Maspenock Hopkinton, MA
Water Quality Data (1977-2016)**

Year	Station Field ID	Sample ID Number	Total			Chl <i>a</i> (ug/L)
			Coliform (#/100 ml)	Fecal Coliform (#/100 ml)	E. coli (#/100 ml)	
2015	North				1	
2015	Middle				0.5	
2015	South				2	
2015	North				110	
2015	Middle				5	
2015	South				5	
2016	North				6.3	
2016	Middle				3.1	
2016	South				47.1	
2016	North					
2016	Middle					
2016	South					

