

**Table 1: Lake Massapoag - Water Quality Profile at Deep Hole Sampling Location**

DATE:	June 2, 2022				July 26, 2022				October 3, 2022			
Depth (m)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperat ure (C)	DO (mg/L)	DO (%)	Specific Conductan ce ( $\mu$ S/cm)	Tempera ture (C)	DO (mg/L)	DO (%)	Specific Conducta nce ( $\mu$ S/cm)	Temperat ure (C)
0.5	9.52	109.0	164.7	21.6	7.23	92.5	172.6	27.5	8.70	87.8	170.6	15.9
1	9.48	109.4	164.7	21.6	7.21	91.8	172.6	27.5	8.56	86.5	170.7	15.9
2	9.56	109.8	164.6	21.6	7.15	89.8	172.4	27.3	8.57	86.5	170.6	15.9
3	9.66	111.1	164.5	21.6	6.88	86.0	172.4	27.2	8.6	86.7	170.7	15.9
4	8.91	101.7	165.6	21.1	6.55	82.9	172.6	26.9	8.56	87.0	170.6	15.9
5	7.50	79.0	164.3	17.2	2.97	34.4	172.6	25.0	8.67	87.3	170.6	15.9
6	6.80	66.7	162.5	14.3	0.14	1.4	183.3	21.3	8.63	87.0	170.6	15.9
7	7.08	68.6	162.2	13.3	0.05	0.5	185.1	17.6	8.57	86.2	170.6	15.9
8	7.03	67.8	162.2	13.1	0.04	0.4	180.0	15.0	8.53	86.3	170.6	15.9
9	6.81	65.5	162.5	12.8	0.04	0.4	179.2	14.7	8.59	86.6	170.6	15.9
10	6.61	63.3	163.2	12.7	0.03	0.3	176.8	12.9	8.65	87.1	170.6	15.8
11	2.19	21.4	163.6	12.6	0.03	0.3	179.8	12.6	8.68	87.4	170.6	15.8
12	0.59	6.0	163.4	12.7	0.02	0.2	186.1	12.5	3.38	3.4	172.1	15.4
13	0.40	4.0	202.7	13.0	0.02	0.2	187.1	12.4	0.10	0.9	179.8	15.2

Total Depth: 13.4 m (44 ft)  
Secchi Depth: 2.0 m (6.6 ft)

Total Depth: 13.4 m (44 ft)  
Secchi Depth: 3.0 m (9.8 ft)

Total Depth: 13.4 m (44 ft)  
Secchi Depth: 2.0 m (6.6 ft)

Source: TRC

**Table 2: Water Quality at Fletcher's Cove Sampling Location**

DATE:	June 2, 2022				July 26, 2022				October 3, 2022			
Depth (m)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)
0.5	9.7	115.3	164.8	23	7.33	94.4	172.8	27.4	9.52	91.1	170.9	13.3
1					7.18	89.9	173.2	27.4	9.46	90.1	170.9	13.4
Total Depth: 0.5 m (1.6 ft) Secchi Depth: on bottom				Total Depth: 1.3 m (4.3 ft) Secchi Depth: on bottom				Total Depth: 1.2 m (4.0 ft) Secchi Depth: on bottom				

**Table 3: Water Quality at Lagoon Inlet/South Cove Sampling Location**

DATE:	June 2, 2022				July 26, 2022				October 3, 2022			
Depth (m)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)
0.5	8.4	99.3	165.4	23.2	7.13	91.5	172.1	27.6	9.2	88.7	170.8	13.9
1					7.34	93.8	172.4	27.6	9.17	88.5	170.8	13.9
Total Depth: 0.6 m (1.9 ft) Secchi Depth: on bottom				Total Depth: 1.5 m (4.9 ft) Secchi Depth: on bottom				Total Depth: 1.8 m (5.8 ft) Secchi Depth: on bottom				

**Table 4: Water Quality at Horton's Cove Sampling Location**

DATE:	June 2, 2022				July 26, 2022				October 3, 2022			
Depth (m)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)	DO (mg/L)	DO (%)	Specific Conductance ( $\mu$ S/cm)	Temperature (C)
0.5									8.98	88.1	170.6	14.5
1									9.12	89.3	170.7	14.5
2									9.08	88.6	170.7	14.5
									Total Depth: 2.0 m (6.6 ft) Secchi Depth: on bottom			

Source: TRC

**Table 5: Lake Massapoag - Additional Water Quality Parameters**

Sampling Date	Sampling Location	Depth (m)	Total Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Ammonia - N (mg/L)	Nitrite-N (mg/L)	Nitrate-N (mg/L)	Total Phosphorus (mg/L)	Dissolved Phosphorus (mg/L)	Iron (mg/L)	pH (pH)	Turbidity (NTU)
6/2/2022	Deep Hole – Surface	0.5	0.44	0.44		<0.010	<0.02	0.045	0.046		7.2	0.005
	Deep Hole - Bottom	12	0.65	0.60		<0.010	0.05	0.057	0.091		6.3	0.32
	Fletcher's Cove	0.5	0.41	0.41		<0.010	<0.02	0.057	0.018		6.9	0.40
	Lagoon Inlet South Cove	0.5	0.40	0.40		<0.010	<0.02	0.056	0.052		6.3	0.18
7/26/2022	Deep Hole – Surface	0.5	0.41	0.41		<0.010	<0.02	0.017	0.010		7.2	1.95
	Deep Hole - Bottom	12	0.70	0.89		0.014	<0.02	0.022	0.013		6.9	1.58
	Fletcher's Cove	0.5	0.41	0.41		<0.010	<0.02	0.022	0.007		7.0	1.72
	Lagoon Inlet South Cove	0.5	0.41	0.41		<0.010	<0.02	0.014	0.006		7.2	1.67
	Horton's Cove	0.5	0.47	0.47		<0.010	<0.02	0.014	0.005		7.1	1.98
10/3/2022	Deep Hole – Surface	0.5	0.54	0.54	0.07	<0.010	<0.02	0.018	0.017	0.293	7.2	1.89
	Deep Hole - Bottom	12	0.46	0.46	<0.05	<0.010	<0.02	0.031	0.013	0.263	7.0	1.76
	Fletcher's Cove	0.5	0.87	0.87	0.36	<0.010	<0.02	0.027	0.021	0.222	7.6	2.21
	Lagoon Inlet South Cove	0.5	0.51	0.51	<0.05	<0.010	<0.02	0.087	0.012	0.196	7.4	1.65
	Horton's Cove	0.5	0.51	0.51	0.1	<0.010	<0.02	0.021	0.02	0.216	8.2	0.06

Source: TRC. Chlorophyll a at Deep Hole: 7/26/22 - Surface: 4.20 mg/m<sup>3</sup>. 10/3/2022 - Surface: 4.78 mg/m<sup>3</sup>