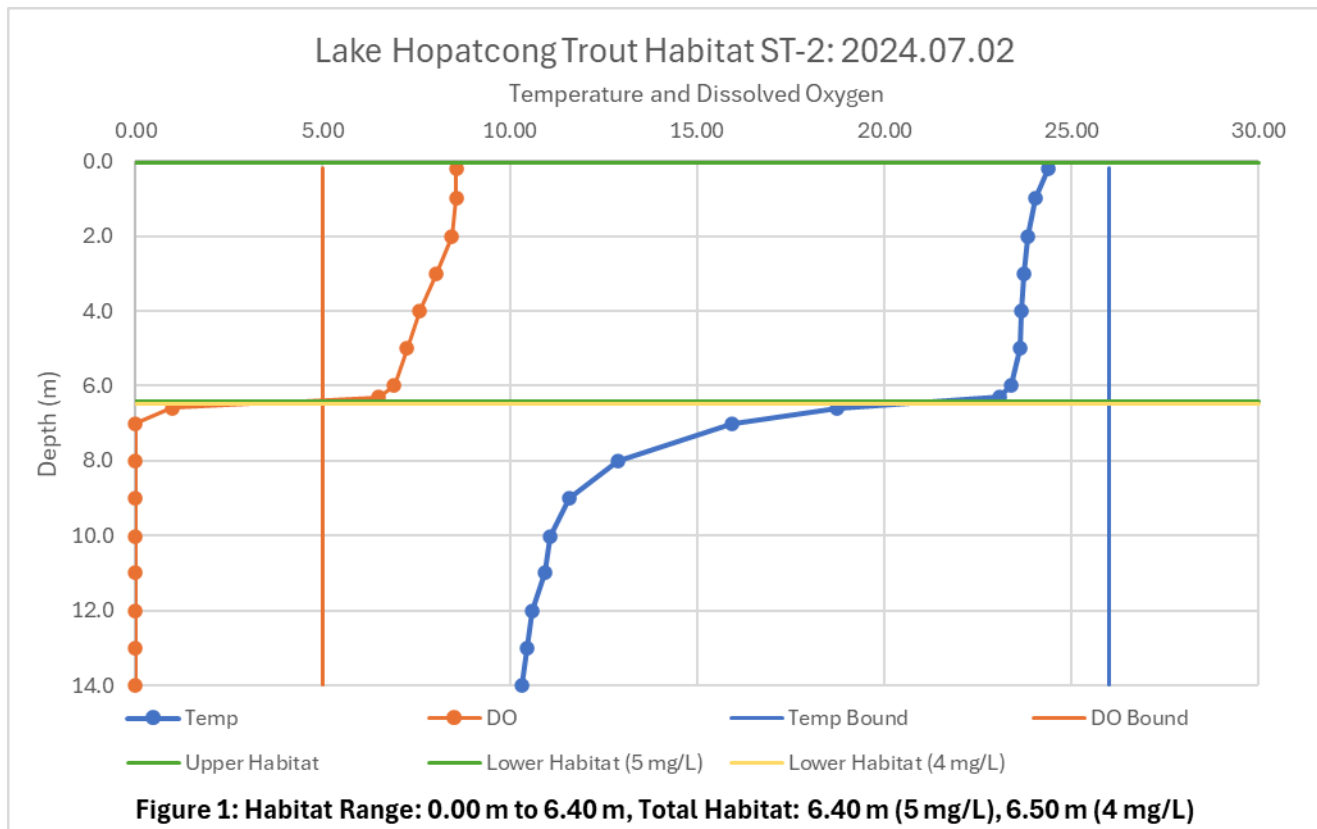


Lake Hopatcong Commission
Trout Committee
NOT FOR EXTERNAL DISTRIBUTION

RE: Preliminary Trout Habitat Data July 2, 2024

July 3, 2024

This memorandum presents the preliminary trout habitat data collected on July 2, 2024. The data includes both the in-situ water quality table for the event (including highlighting viable trout habitat in blue) and figures showing the ST-2 (Mid-Lake) temperature and dissolved oxygen (DO) profiles. In addition to the profiles, the figures show various habitat thresholds including the upper temperature bound (26.0 °C) and the lower dissolved oxygen bound (4.0 mg/L and 5.0 mg/L) as vertical lines. It also presents horizontal lines representing the upper and lower trout habitat bounds in the lake as determined by the intersection of the collected data and the habitat threshold bounds.



Lake Hopatcong *In-Situ* Monitoring Data 2024.07.02

Station	Depth (m)		Sample	Temperature	Specific Conductance	Dissolved Oxygen		pH
	Total	Secchi		°C	µS/cm	Conc. (mg/L)	Sat. (%)	
Byram Bay	9.5	1.1	0.2	25.32	357.3	8.49	105.8	7.86
			1.0	24.30	356.0	8.75	106.8	7.89
			2.0	24.07	355.5	8.60	104.9	7.76
			3.0	23.80	355.7	7.81	94.2	7.70
			4.0	23.72	355.3	7.72	93.2	7.63
			5.0	22.85	353.4	5.56	65.7	7.48
			5.3	22.65	353.4	4.98	55.5	7.35
			6.0	20.90	351.2	2.82	32.2	7.17
			7.0	17.99	348.1	0.00	0.0	7.08
			8.0	13.99	351.7	0.00	0.0	7.04
Halsey Island	10.3	1	0.1	24.31	366.7	8.64	105.4	7.91
			1.0	24.31	355.9	8.62	105.1	7.84
			2.0	23.77	355.3	8.34	100.8	7.78
			3.0	23.69	355.2	8.02	96.5	7.70
			4.0	23.66	355.3	7.69	92.8	7.64
			5.0	23.59	355.3	7.34	88.4	7.60
			6.0	23.32	355.5	6.39	76.6	7.41
			6.3	22.04	352.2	4.75	55.5	0.24
			7.0	16.60	348.8	0.00	0.0	7.14
			8.0	12.67	350.9	0.00	0.0	7.16
Mid-Lake	14.5	1.1	0.2	24.38	356.4	8.56	104.6	7.88
			1.0	24.03	355.6	8.56	104.2	7.87
			2.0	23.82	355.9	8.45	102.1	7.81
			3.0	23.73	356.1	8.03	96.9	7.70
			4.0	23.67	356.0	7.60	91.7	7.63
			5.0	23.61	355.9	7.25	87.3	7.50
			6.0	23.37	356.3	6.91	82.6	7.46
			6.3	23.08	357.1	6.49	77.8	7.36
			6.6	18.75	349.5	0.98	10.7	7.20
			7.0	15.92	347.7	0.00	0.0	7.14
			8.0	12.90	349.1	0.00	0.0	7.18
			9.0	11.60	350.3	0.00	0.0	7.23
			10.0	11.07	350.3	0.00	0.0	7.28
			11.0	10.93	354.4	0.00	0.0	7.25
12.0	10.61	356.8	0.00	0.0	7.26			
13.0	10.45	358.1	0.00	0.0	7.26			
14.0	10.33	360.4	0.00	0.0	7.27			
Great Cove	7.3	1.2	0.1	24.74	355.2	8.36	102.9	7.89
			1.0	24.41	355.7	8.62	105.2	7.96
			2.0	23.82	354.9	8.38	101.9	7.77
			3.0	23.68	355.4	7.73	93.0	7.74
			4.0	23.63	355.9	7.51	90.5	7.64
			5.0	23.58	355.8	7.39	89.1	7.60
			6.0	23.77	356.8	6.23	74.6	7.47
			6.3	22.07	352.2	4.80	56.2	7.33
King's Cove	2.7	1.1	0.2	24.79	360.4	8.56	105.3	7.92
			1.0	24.44	359.6	8.65	105.8	7.85
			2.0	23.75	357.2	8.22	99.2	7.77
			2.5	23.65	357.8	6.93	83.1	7.60

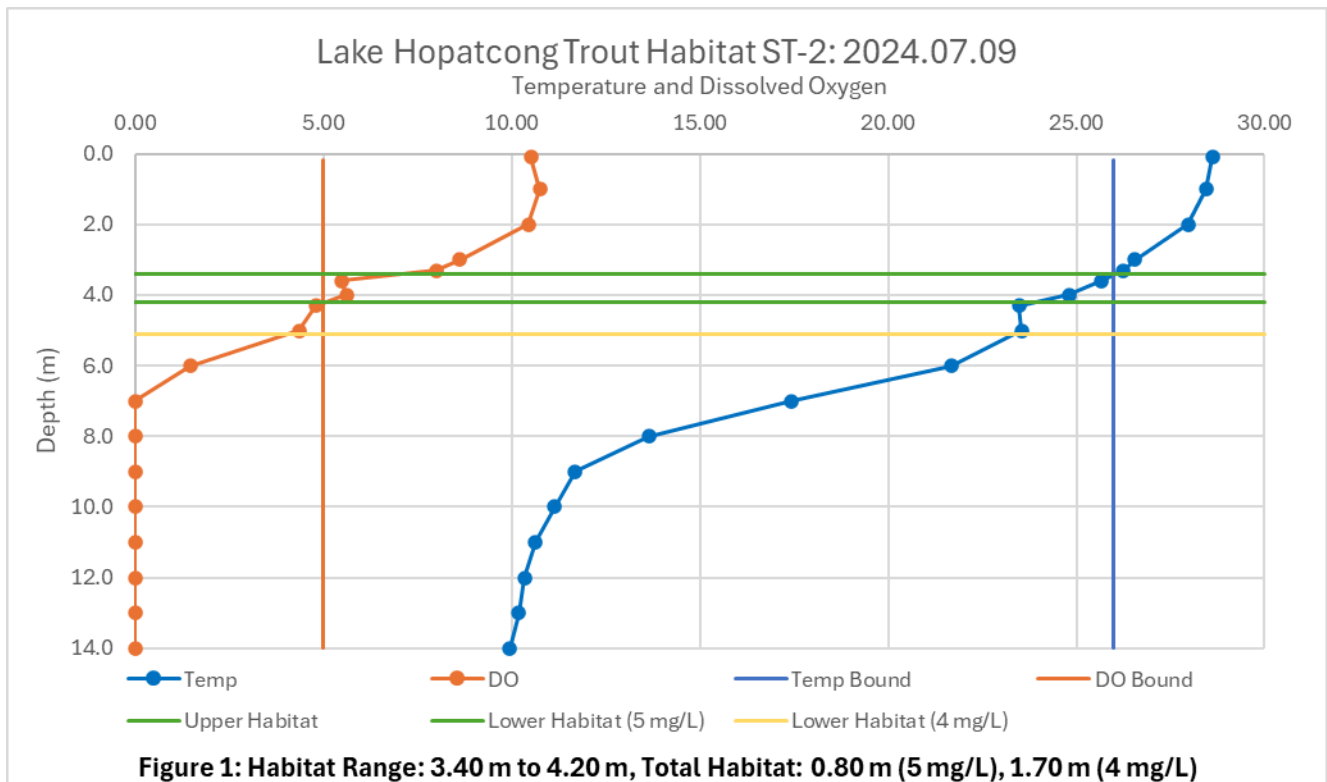
Trout Habitat Highlighted in Pale Blue (5 mg/L) and Gray (4 mg/L)

Lake Hopatcong Commission
Trout Committee
NOT FOR EXTERNAL DISTRIBUTION

RE: Preliminary Trout Habitat Data July 9, 2024

July 15, 2024

This memorandum presents the preliminary trout habitat data collected on July 9, 2024. The data includes both the in-situ water quality table for the event (including highlighting viable trout habitat in blue) and figures showing the ST-2 (Mid-Lake) temperature and dissolved oxygen (DO) profiles. In addition to the profiles, the figures show various habitat thresholds including the upper temperature bound (26.0 °C) and the lower dissolved oxygen bound (4.0 mg/L and 5.0 mg/L) as vertical lines. It also presents horizontal lines representing the upper and lower trout habitat bounds in the lake as determined by the intersection of the collected data and the habitat threshold bounds.



Lake Hopatcong *In-Situ* Monitoring Data 2024.07.09

Station	Depth (m)		Sample	Temperature	Specific Conductance	Dissolved Oxygen		pH
	Total	Secchi		°C	µS/cm	Conc. (mg/L)	Sat. (%)	s.u.
STA-1	2.30	0.80	0.1	29.97	283.7	7.95	108.3	7.28
			1.0	29.24	286.2	7.46	100.6	7.31
			2.0	28.00	287.9	4.81	63.9	7.12
STA-2	14.20	1.00	0.1	28.61	362.4	10.52	140.2	8.81
			1.0	28.45	363.2	10.75	142.1	8.83
			2.0	27.97	362.1	10.45	137.7	8.75
			3.0	26.55	360.3	8.62	110.8	8.09
			3.3	26.25	360.7	7.99	102.7	7.75
			3.6	25.67	359.8	5.48	68.6	7.48
			4.0	24.81	360.4	5.62	69.9	7.34
			4.3	23.48	359.9	4.80	58.9	7.31
			5.0	23.55	358.9	4.36	59.0	7.22
			6.0	21.67	355.5	1.47	17.2	7.00
			7.0	17.44	352.4	0.00	0.0	6.89
			8.0	13.65	352.0	0.00	0.0	6.88
			9.0	11.69	352.6	0.00	0.0	6.88
			10.0	11.14	355.6	0.00	0.0	6.86
11.0	10.63	358.4	0.00	0.0	6.86			
12.0	10.34	362.6	0.00	0.0	6.86			
13.0	10.20	368.9	0.00	0.0	6.88			
14.0	9.95	373.1	0.00	0.0	6.80			
STA-3	2.30	0.80	0.1	29.50	395.1	9.89	133.9	8.69
			1.0	29.01	396.5	9.34	125.3	8.53
			2.0	28.43	397.8	7.50	100.4	8.00
STA-4	3.20	0.90	0.1	29.05	363.4	9.65	129.6	8.44
			1.0	28.18	363.1	10.17	134.5	8.60
			2.0	27.03	360.9	8.77	113.5	7.99
STA-5	3.00	1.00	3.0	25.95	363.0	3.25	41.3	7.35
			0.1	28.97	366.0	9.31	121.9	8.25
			1.0	28.87	366.5	8.87	118.3	8.10
STA-6	3.30	0.90	2.0	27.64	364.2	7.38	96.6	7.69
			2.7	26.78	367.8	4.23	54.5	7.32
			0.1	29.67	359.5	10.04	136.5	8.56
STA-7	1.40	0.90	1.0	29.58	360.9	10.14	137.6	8.50
			2.0	28.97	360.4	8.99	120.7	8.02
			3.0	28.11	361.8	5.84	74.5	7.57
STA-8	7.50	0.90	0.1	30.21	302.9	7.81	107.0	7.48
			1.0	30.10	303.0	7.69	105.1	7.43
			0.1	28.93	364.0	10.72	143.7	8.84
			1.0	28.78	363.4	10.82	144.6	8.90
			2.0	28.18	362.4	10.55	139.5	8.79
			3.0	26.95	360.9	9.06	117.3	8.12
			3.3	26.40	361.5	6.63	85.0	7.69
			3.6	26.13	361.9	5.67	72.3	7.49
			4.0	25.62	362.2	4.52	57.1	7.34
			5.0	23.62	358.4	4.23	51.4	7.26
STA-9	7.30	0.80	6.0	21.64	354.6	1.52	17.9	7.14
			7.0	17.71	351.7	0.00	0.0	7.04
			0.1	29.73	364.4	10.84	147.5	8.82
			1.0	29.67	364.2	10.88	147.8	8.84
			2.0	28.40	361.7	10.45	138.8	8.63
			3.0	27.62	361.4	9.91	130.2	8.43
			3.6	26.77	361.1	7.67	99.1	7.74
			4.0	25.71	359.0	6.08	76.9	7.53
			4.3	25.01	359.3	5.50	68.7	7.40
			4.6	24.15	350.6	4.62	56.8	7.27
STA-10	1.30	0.80	5.0	23.71	358.4	3.89	47.5	7.17
			6.0	22.22	354.8	1.61	19.0	7.00
			7.0	19.99	350.9	0.00	0.0	6.90
			0.1	30.26	303.8	9.02	123.7	7.90
			1.0	30.26	304.0	9.02	123.7	7.87
			0.1	29.44	243.2	6.11	83.4	7.10
			1.0	28.28	247.7	4.39	57.5	6.96
STA-11	1.20	1.20+	0.1	29.11	369.2	8.28	111.3	7.60
			1.0	27.97	367.4	7.75	102.1	7.56
			1.7	27.32	369.8	2.85	37.1	7.15
STA-12	2.00	0.80	0.1	29.11	369.2	8.28	111.3	7.60
			1.0	27.97	367.4	7.75	102.1	7.56

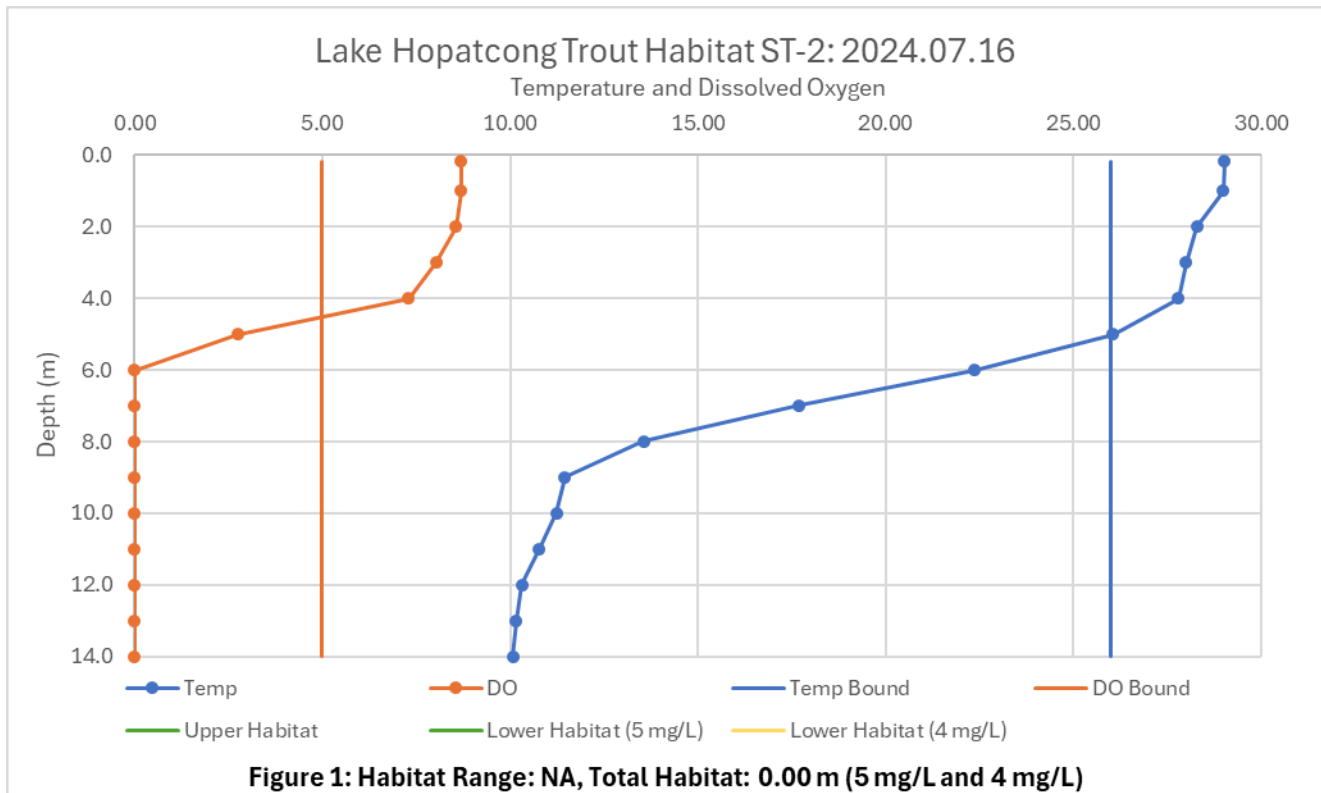
Trout Habitat Highlighted in Pale Blue (5 mg/L) and Gray (4 mg/L)

Lake Hopatcong Commission
Trout Committee
NOT FOR EXTERNAL DISTRIBUTION

RE: Preliminary Trout Habitat Data July 16, 2024

July 18, 2024

This memorandum presents the preliminary trout habitat data collected on July 16, 2024. The data includes both the in-situ water quality table for the event (including highlighting viable trout habitat in blue) and figures showing the ST-2 (Mid-Lake) temperature and dissolved oxygen (DO) profiles. In addition to the profiles, the figures show various habitat thresholds including the upper temperature bound (26.0 °C) and the lower dissolved oxygen bound (4.0 mg/L and 5.0 mg/L) as vertical lines. It also presents horizontal lines representing the upper and lower trout habitat bounds in the lake as determined by the intersection of the collected data and the habitat threshold bounds.



Lake Hopatcong *In-Situ* Monitoring Data 2024.07.16

Station	Depth (m)		Sample	Temperature	Specific Conductance	Dissolved Oxygen		pH
	Total	Secchi		°C	µS/cm	Conc. (mg/L)	Sat. (%)	s.u.
Byram Bay	9.5	1.0	0.2	29.67	364.9	8.88	120.8	8.48
			1.0	29.52	364.7	8.76	119.2	8.42
			2.0	29.10	364.8	8.28	111.8	8.19
			3.0	28.88	365.1	7.77	104.0	7.96
			4.0	28.23	363.6	5.65	75.1	7.51
			4.3	27.31	364.9	3.96	51.1	7.20
			5.0	24.97	358.6	0.60	2.9	6.99
			6.0	22.80	355.9	0.00	0.0	6.90
			7.0	19.01	354.2	0.00	0.0	6.92
			8.0	15.29	355.8	0.00	0.0	6.90
Halsey Island	9.3	1.0	0.1	29.37	365.5	8.75	118.8	8.60
			1.0	29.28	365.8	8.77	118.8	8.61
			2.0	29.16	365.6	8.72	117.8	8.58
			3.0	28.59	365.1	7.97	106.8	8.28
			4.0	28.43	365.5	6.15	82.0	7.74
			4.3	28.13	365.9	6.84	90.9	7.80
			4.6	28.13	365.3	7.24	96.1	7.82
			5.0	25.69	357.5	0.00	0.0	7.19
			6.0	22.74	355.1	0.00	0.0	7.00
			7.0	19.63	352.2	0.00	0.0	6.99
Mid-Lake	14.5	0.9	0.2	29.02	365.9	8.69	116.9	8.57
			1.0	28.98	366.3	8.69	116.9	8.58
			2.0	28.28	365.5	8.55	113.8	8.59
			3.0	28.00	365.3	8.03	106.3	8.25
			4.0	27.80	365.3	7.30	96.2	7.86
			5.0	26.05	362.9	2.75	35.1	7.34
			6.0	22.35	356.1	0.00	0.0	7.06
			7.0	17.69	353.9	0.00	0.0	7.00
			8.0	13.56	355.5	0.00	0.0	6.96
			9.0	11.45	357.4	0.00	0.0	6.96
			10.0	11.23	357.7	0.00	0.0	6.96
			11.0	10.78	361.2	0.00	0.0	6.95
			12.0	10.31	366.9	0.00	0.0	6.96
			13.0	10.16	369.2	0.00	0.0	6.99
14.0	10.08	370.0	0.00	0.0	7.00			
Great Cove	7.3	1.00	0.1	29.55	366.6	8.93	121.9	8.77
			1.0	29.41	366.4	8.98	121.6	8.77
			2.0	28.84	365.6	8.86	118.3	8.72
			3.0	28.52	365.6	8.54	114.0	8.55
			4.0	27.08	363.8	4.59	59.7	7.60
			5.0	24.97	358.4	0.60	7.5	7.12
			6.0	23.76	356.2	0.00	0.0	7.02
7.0	18.38	351.4	0.00	0.0	7.02			
King's Cove	2.7	0.8	0.2	29.28	369.2	8.84	119.0	8.43
			1.0	29.04	368.4	8.98	121.3	8.50
			2.0	28.05	365.3	7.82	103.6	7.99
			2.6	27.66	365.3	4.30	56.1	7.43

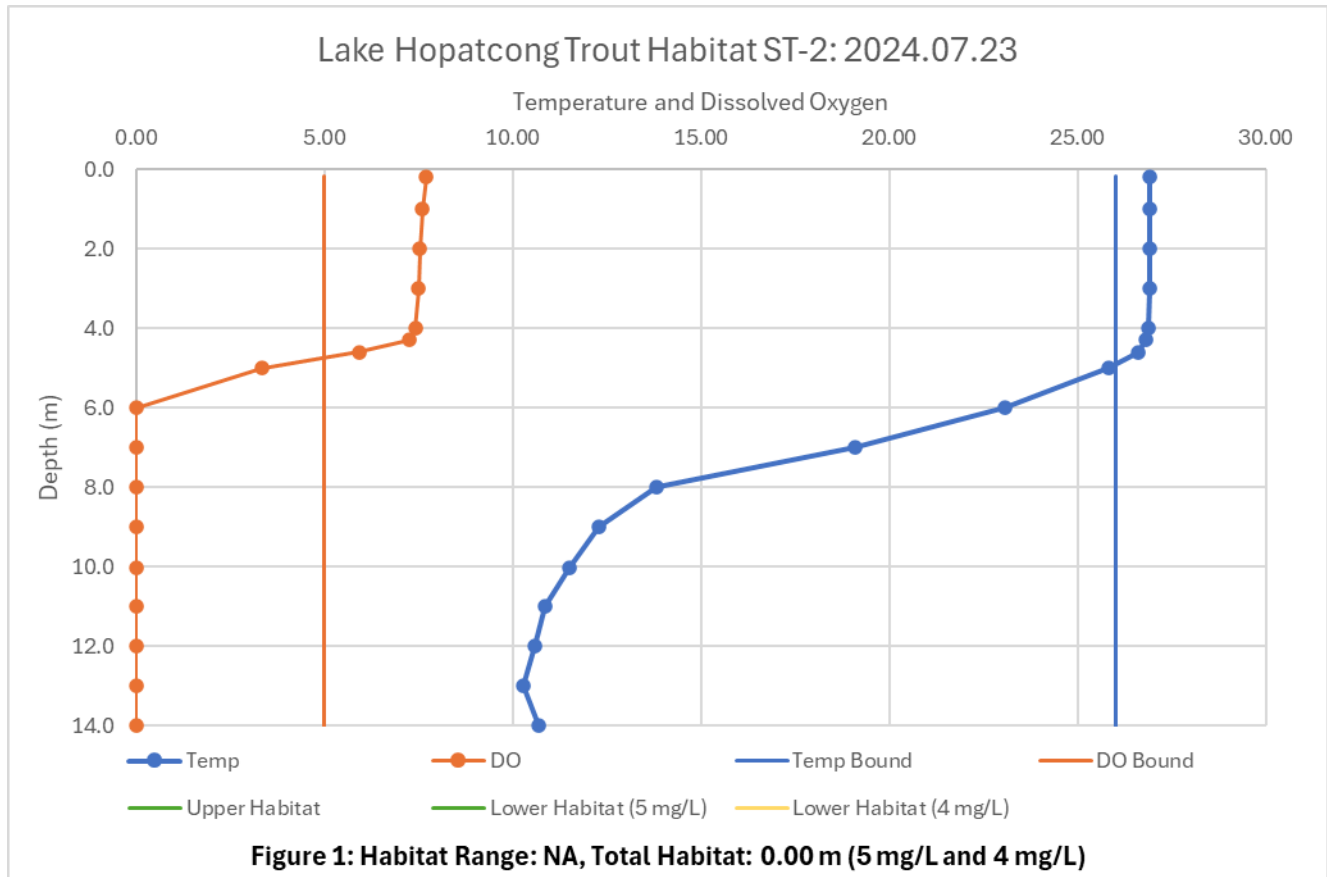
Trout Habitat Highlighted in Pale Blue (5 mg/L) and Gray (4 mg/L)

Lake Hopatcong Commission
Trout Committee
NOT FOR EXTERNAL DISTRIBUTION

RE: Preliminary Trout Habitat Data July 23, 2024

July 25, 2024

This memorandum presents the preliminary trout habitat data collected on July 23, 2024. The data includes both the in-situ water quality table for the event (including highlighting viable trout habitat in blue) and figures showing the ST-2 (Mid-Lake) temperature and dissolved oxygen (DO) profiles. In addition to the profiles, the figures show various habitat thresholds including the upper temperature bound (26.0 °C) and the lower dissolved oxygen bound (4.0 mg/L and 5.0 mg/L) as vertical lines. It also presents horizontal lines representing the upper and lower trout habitat bounds in the lake as determined by the intersection of the collected data and the habitat threshold bounds.



Lake Hopatcong *In-Situ* Monitoring Data 2024.07.23

Station	Depth (m)		Sample	Temperature	Specific Conductance	Dissolved Oxygen		pH s.u.
	Total	Secchi		°C	µS/cm	Conc. (mg/L)	Sat. (%)	
Byram Bay	9.5	1.1	0.2	27.00	359.4	7.93	102.6	7.72
			1.0	26.90	359.6	7.66	98.9	7.67
			2.0	26.85	359.6	7.40	95.3	7.60
			3.0	26.85	359.5	7.05	90.9	7.50
			4.0	26.81	359.6	7.26	93.6	7.58
			4.3	26.80	359.6	7.10	91.4	7.51
			4.6	26.80	359.6	7.00	90.2	7.59
			5.0	26.73	359.9	6.87	88.3	7.45
			5.3	25.76	353.2	2.72	34.4	7.05
			6.0	21.82	359.7	0.00	0.0	6.86
			7.0	17.99	357.4	0.00	0.0	6.89
8.0	14.84	356.4	0.00	0.0	6.91			
9.0	13.51	357.8	0.00	0.0	6.92			
Halsey Island	10.3	1.1	0.1	26.96	359.6	7.89	102.1	7.77
			1.0	26.94	359.9	7.90	102.1	7.81
			2.0	26.87	359.8	7.70	97.4	7.76
			3.0	26.86	359.9	7.46	96.1	7.66
			4.0	26.78	359.7	6.99	89.4	7.56
			4.3	26.77	359.9	6.80	87.6	7.50
			4.6	26.76	360.1	6.53	84.0	7.49
			5.0	26.61	360.0	5.76	73.9	7.40
			6.0	22.26	358.4	0.00	0.0	6.99
			7.0	18.10	356.4	0.00	0.0	6.95
			8.0	14.82	353.0	0.00	0.0	6.90
9.0	12.78	352.2	0.00	0.0	6.93			
Mid-Lake	14.5	1.1	0.2	26.91	359.8	7.71	99.5	7.75
			1.0	26.90	360.0	7.60	98.1	7.78
			2.0	26.90	360.1	7.54	97.2	7.79
			3.0	26.90	360.2	7.50	96.8	7.71
			4.0	26.89	360.3	7.41	95.9	7.66
			4.3	26.83	360.5	7.24	93.6	7.63
			4.6	26.61	354.3	5.91	75.8	7.44
			5.0	25.82	355.5	3.33	41.1	7.06
			6.0	23.06	358.6	0.00	0.0	6.89
			7.0	19.10	355.2	0.00	0.0	6.93
			8.0	13.82	346.2	0.00	0.0	6.89
			9.0	12.30	351.4	0.00	0.0	6.90
			10.0	11.51	353.2	0.00	0.0	6.89
			11.0	10.85	359.0	0.00	0.0	6.90
12.0	10.60	359.4	0.00	0.0	6.92			
13.0	10.29	364.1	0.00	0.0	6.92			
14.0	10.68	369.3	0.00	0.0	6.95			
Great Cove	7.3	1.1	0.1	27.03	354.6	8.69	104.7	7.87
			1.0	26.85	360.0	8.13	104.9	7.99
			2.0	26.90	359.7	7.97	102.9	7.93
			3.0	26.81	359.8	7.72	99.5	7.84
			4.0	26.77	360.0	7.42	95.7	7.76
			4.3	26.64	360.1	7.06	90.7	7.68
			4.6	25.86	354.9	3.52	44.6	7.22
			5.0	25.52	354.8	2.74	34.5	7.07
			6.0	22.84	353.1	0.00	0.0	6.89
7.0	18.93	355.2	0.00	0.0	6.93			
King's Cove	2.7	0.9	0.0	26.78	360.0	6.97	89.8	7.56
			1.0	26.75	360.2	6.93	89.2	7.56
			2.0	26.69	360.1	6.76	86.9	7.49
			2.7	26.63	360.6	6.24	80.2	7.40

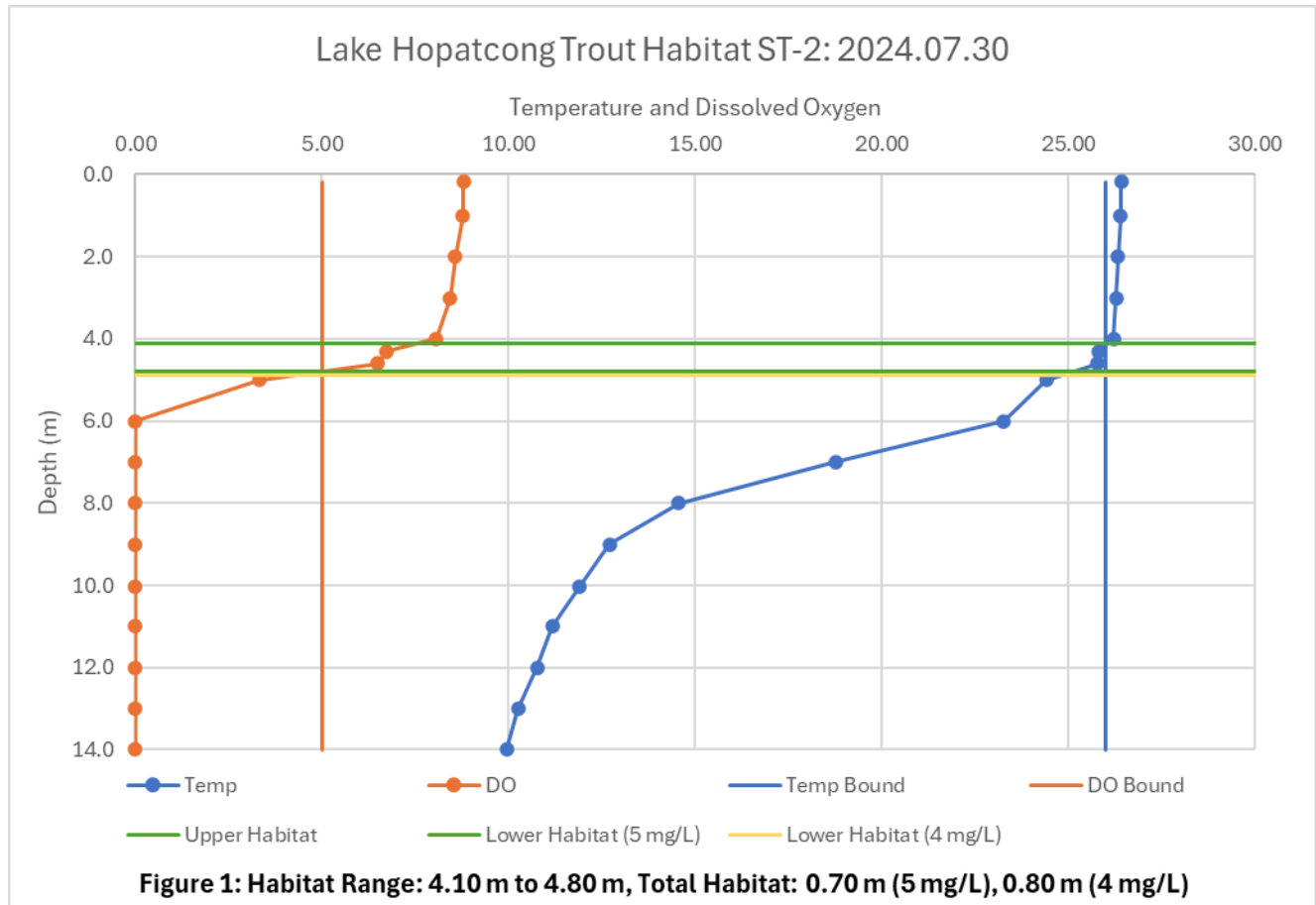
Trout Habitat Highlighted in Pale Blue (5 mg/L) and Gray (4 mg/L)

Lake Hopatcong Commission
 Trout Committee
 NOT FOR EXTERNAL DISTRIBUTION

RE: Preliminary Trout Habitat Data August 1, 2024

August 1, 2024

This memorandum presents the preliminary trout habitat data collected on July 30, 2024. The data includes both the in-situ water quality table for the event (including highlighting viable trout habitat in blue) and figures showing the ST-2 (Mid-Lake) temperature and dissolved oxygen (DO) profiles. In addition to the profiles, the figures show various habitat thresholds including the upper temperature bound (26.0 °C) and the lower dissolved oxygen bound (4.0 mg/L and 5.0 mg/L) as vertical lines. It also presents horizontal lines representing the upper and lower trout habitat bounds in the lake as determined by the intersection of the collected data and the habitat threshold bounds.



Lake Hopatcong In-Situ Monitoring Data 2024.07.30

Station	Depth (m)		Sample	Temperature	Specific Conductance	Dissolved Oxygen		pH s.u.
	Total	Secchi		°C	µS/cm	Conc. (mg/L)	Sat. (%)	
Byram Bay	9.5	1.1	0.2	26.70	366.3	9.13	117.6	8.14
			1.0	26.63	366.3	9.12	117.3	8.13
			2.0	26.52	366.5	9.04	115.9	8.10
			3.0	26.44	366.9	8.87	113.8	8.00
			4.0	26.10	365.8	7.57	96.4	7.57
			4.3	26.05	366.1	7.47	95.6	7.56
			4.6	25.99	366.1	7.25	91.9	7.41
			5.0	25.89	365.6	6.80	86.2	7.36
			5.3	25.82	365.3	6.37	80.4	7.33
			5.6	25.46	363.6	4.45	56.1	7.15
			6.0	25.23	362.0	4.11	51.5	7.10
			7.0	19.91	377.2	0.00	0.0	7.03
8.0	16.11	365.5	0.00	0.0	7.02			
9.0	11.83	367.6	0.00	0.0	6.96			
Halsey Island	10.3	1.0	0.1	26.48	367.9	8.74	112.1	8.05
			1.0	26.44	367.4	8.76	112.3	8.09
			2.0	26.40	367.4	8.69	111.3	8.02
			3.0	26.36	367.5	8.60	110.1	7.97
			4.0	26.32	367.5	8.49	108.7	7.91
			4.3	26.29	367.4	8.41	107.3	7.90
			4.6	26.27	367.4	8.32	106.3	7.85
			5.0	26.27	367.5	8.33	106.2	7.83
			5.3	26.09	366.5	7.62	97.1	7.68
			5.6	25.97	366.5	7.07	89.8	7.51
			6.0	25.08	363.7	4.55	56.2	7.23
			7.0	19.05	376.1	0.00	0.0	7.04
8.0	14.59	360.9	0.00	0.0	7.00			
9.0	12.43	363.5	0.00	0.0	7.00			
Mid-Lake	14.5	1.0	0.2	26.41	367.1	8.79	111.6	8.11
			1.0	26.40	367.2	8.77	112.5	8.11
			2.0	26.33	366.9	8.57	109.6	7.98
			3.0	26.27	367.0	8.43	107.8	7.93
			4.0	26.21	366.9	8.06	102.9	7.78
			4.3	25.82	365.9	6.73	85.2	7.47
			4.6	25.78	365.7	6.50	82.3	7.36
			5.0	24.40	362.8	3.31	41.2	7.08
			6.0	23.26	349.8	0.00	0.0	6.75
			7.0	18.77	373.2	0.00	0.0	6.92
			8.0	14.56	352.3	0.00	0.0	6.96
			9.0	12.71	357.1	0.00	0.0	6.95
			10.0	11.90	358.7	0.00	0.0	6.93
			11.0	11.18	361.6	0.00	0.0	6.91
12.0	10.76	365.5	0.00	0.0	6.91			
13.0	10.25	374.3	0.00	0.0	6.91			
14.0	9.95	379.5	0.00	0.0	6.96			
Great Cove	7.3	1.0	0.1	26.93	367.7	9.14	118.0	8.33
			1.0	26.85	368.0	9.14	118.0	8.39
			2.0	26.74	367.9	9.07	116.9	8.35
			3.0	26.60	367.7	8.64	111.1	8.12
			4.0	26.16	367.0	7.47	95.3	7.77
			4.3	26.11	367.1	7.55	96.2	7.68
			4.6	26.03	366.7	7.22	91.4	7.56
			5.0	25.60	366.7	5.87	74.1	7.39
			5.3	24.59	361.9	3.16	39.1	7.10
6.0	23.53	348.3	0.00	0.0	6.84			
7.0	17.66	366.9	0.00	0.0	6.91			
King's Cove	2.7	0.9	0.2	26.57	370.0	8.92	114.5	8.17
			1.0	26.54	369.9	8.82	113.2	8.14
			2.0	26.40	369.6	8.23	105.4	7.86

Trout Habitat Highlighted in Pale Blue (5 mg/L) and Gray (4 mg/L)