Composition & Dominance, Growth Rates and Microcystin estimates

Town Beach

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)	Measured MC (ug L-1)
5/4/2022	<50						
5/17/2022	<50						
6/1/2022	<50						
6/15/2022	<50	4.02					
6/21/2022	<50	0.92					
6/28/2022	<50	3.53					
7/5/2022	<50	2.39					
7/12/2022	<50	1.92					
7/19/2022	<50	1.46					
7/26/2022	<50	1.69					
8/2/2022	<50	0.1					
8/9/2022	<50	0.77					
8/16/2022	<50	1.69					
8/23/2022	<50	2.84		2.84	2.61	149.6	
9/4/2022	<50	1.92		1.92	2.35	17.67	
9/12/2022	<50	2.61		2.61	1.92	287.1	
9/20/2022	<50	0.1					

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)	Measured MC (ug L-1)	PST (ug ug-1)
5/4/2022	W:LW							
5/17/2022	W:LW							
6/1/2022	W:LW							
6/15/2022	W:LW	18.13		1.258398	1.083675	0.012		
6/21/2022	W:LW	0.55		-0.25964	0.27016	0.002		
6/28/2022	W:LW	8.15		0.911166	1.38709	0.244	0.316	0.04
7/5/2022	W:LW	5.15		0.711807	2.153155	0.144	**0.302**	**0.06**
7/12/2022	W:LW	1.46		0.164353	1.529677	0.034		
7/19/2022	W:LW	1.23						
7/26/2022	W:LW	2.61						
8/2/2022	W:LW	0.1						
8/9/2022	W:LW	1.46						
8/16/2022	W:LW	1.46						
8/23/2022	W:LW	2.61						
9/4/2022	W:LW	2.35						
9/12/2022	W:LW	1.92						
9/20/2022	W:LW	0.1						

Dates	Composition & Dominance	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)	Measured MC (ug L-1) or ATX (ug L-1)	PST (ug ug-1)
5/4/2022		BFC							
5/17/2022		BFC							
6/1/2022		BFC							
6/15/2022	Dolichospermum (100%)	BFC	1554		3.191451	2.119599	0.132		
6/21/2022	Dolichospermum (100%)	BFC	70		1.845098	1.198088	0.025		
6/28/2022	Microcystis (95%)	BFC	140.15		2.146592	1.892283	0.387	1.57	0.01
7/5/2022	Microcystis (50%)	BFC	20.69		1.31576	2.851493	0.750	0.838	0.04
7/12/2022	Microcystis (95%)	BFC	41.86	0.100669	1.621799	1.202826	1.595		
7/19/2022	Microcystis (95%)	BFC	32.55		1.512551	3.077409	1.195		
7/26/2022	Microcystis (90%)	BFC	28.13		1.44917	2.004647	1.011		
8/2/2022	Microcystis (99%)	BFC	119.05	0.206101	2.075729	1.723937	5.296	0.990	0.01
8/9/2022	Dolichospermum (95%)	BFC	57.44		1.759214	1.352063	0.022		
8/16/2022	Dolichospermum (80%)	BFC	91.62		1.96199	1.460711	0.029		
8/23/2022	Dolichospermum	BFC	149.9		2.175802	1.575312	0.038		
9/4/2022	Dolichospermum	BFC	17.67		1.247237	1.877694	0.012		
9/12/2022	Dolichospermum/Microcystis (75/25	BFC	287.1		2.458033	1.72656	0.053	0.210	
9/20/2022	Dolichospermum (99%)	BFC	158.3		2.199481	1.568002	0.039	N/D	

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)	Measured MC (ug L-1. ATX (ug L-1 as needed)	PST (ug ug-1)
5/4/2022	Grab							
5/17/2022	Grab							
6/1/2022	Grab							
6/15/2022	Grab	1788		3.252368	2.152244	0.142	N/D	
6/21/2022	Grab							
6/28/2022	Grab	1820		3.260071	5.003562	121.22	**69.19**	0.04
7/5/2022	Grab	14416		4.158845	6.115354	1304.23	**232.38**	0.02
7/12/2022	Grab							
7/19/2022	Grab							
7/26/2022	Grab							
8/9/2022	Grab	30640					**ATX 0.50 ug L-1**	
8/9/2022	Sed 1	16120					**ATX 0.50 ug L-1**	
8/9/2022	Sed 2	181					**ATX 0.20 ug L-1**	
8/9/2022	Sed 3	67					**ATX 0.10 ug L-1**	

Deep 1

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	<50	0.1				
5/17/2022	<50	0.1				
6/1/2022	<50					
6/15/2022	<50	2.39				
6/21/2022	<50					
6/28/2022	<50	2.39				
7/5/2022	<50	6.53				
7/12/2022	<50	1.69				
7/19/2022	<50	1.69				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)	Measured MC (ug L-1)	PST (ug ug-1)
5/4/2022	W:LW	0.1						
5/17/2022	W:LW	0.1						
6/1/2022	W:LW							
6/15/2022	W:LW	5.81		0.764176	0.818822	0.007		
6/21/2022	W:LW							
6/28/2022	W:LW	1.69		0.227887	1.602614	0.040	0.277	0.16
7/5/2022	W:LW	3.53		0.547775	1.969845	0.093		
7/12/2022	W:LW	1		0	1.341	0.022		
7/19/2022	W:LW	1.69						

Dates		Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)	Measured MC (ug L-1)	PST (ug ug-1)
5/4/2022		BFC	0.1						
5/17/2022		BFC	0.1						
6/1/2022	Dolichospermum (100%)	BFC	90.46	0.682249					
6/15/2022	Dolichospermum (100%)	BFC	585.7	0.133421	2.767675	1.892497	0.078		
6/21/2022	Dolichospermum (100%)	BFC	28.13						
6/28/2022	Microcystis (95%)	BFC	61.16		1.786467	3.391865	2.465	0.993	0.02
7/5/2022	Microcystis (50%)	BFC	12.32		1.090611	2.593021	0.392		
7/12/2022	Microcystis (95%)	BFC	22.84	0.088184	1.358696	2.900783	0.796		
7/19/2022	Microcystis (95%)	BFC	29.76	0.037807	1.473633	3.032731	1.078		

Deep 2

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	<50	0.1				
5/17/2022	<50	0.1				
6/1/2022	<50					
6/15/2022	<50	1.69				
6/21/2022	<50					
6/28/2022	<50	1.46				
7/5/2022	<50	1.23				
7/12/2022	<50	1.23				
7/19/2022	<50	1.92				
7/26/2022	<50	1.92				
8/2/2022	<50	0.1				
8/9/2022	<50	0.66				
8/16/2022	<50	1.92				
8/23/2022	<50	1.92				
9/4/2022	<50	1.23				
9/12/2022	<50	2.39				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	W:LW	0.1				
5/17/2022	W:LW	0.1				
6/1/2022	W:LW					
6/15/2022	W:LW	9.68		0.985875	0.917631	0.009
6/21/2022	W:LW					
6/28/2022	W:LW	1.23		0.089905	1.444211	0.028
7/5/2022	W:LW	1.69		0.227887	1.602614	0.040
7/12/2022	W:LW	1.23		0.089905	1.444211	0.028
7/19/2022	W:LW	1.46				
7/26/2022	W:LW	5.61				
8/2/2022	W:LW	1				
8/9/2022	W:LW	2.13				
8/16/2022	W:LW	1.46				
8/23/2022	W:LW	2.61				
9/4/2022	W:LW	1.46				
9/12/2022	W:LW	1.92				

Dates		Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022		BFC	0.1				
5/17/2022		BFC	0.1				
6/1/2022	Dolichospermum (100%)	BFC	167.2	0.530127			
6/15/2022	Dolichospermum (100%)	BFC	1682	0.364936	3.225826	2.13802	0.137
6/21/2022		BFC					
6/28/2022	Microcystis (95%)	BFC	26.97		1.430881	2.983651	0.963
7/5/2022	Microcystis (50%)	BFC	32.32		1.509471	3.073873	1.185
7/12/2022	Microcystis (95%)	BFC	49.75	0.065618	1.696793	3.288918	1.945
7/19/2022	Microcystis (95%)	BFC	19.53				
7/26/2022	Microcystis (995)	BFC	51.86	0.139514	1.714833	3.309628	2.040
8/2/2022	Microcystis (995)	BFC	68.83	0.040442	1.837778	3.450769	2.823
8/9/2022	Dolichospermum (100%)	BFC	52.22		1.717837	3.329889	0.021
8/16/2022	Dolichospermum (100%)	BFC	39.06		1.591752	3.262269	0.018
8/23/2022	Dolichospermum (100%)	BFC	12.1		1.082785	0.989565	0.010
9/4/2022	Dolichospermum (100%)	BFC	10		1	0.9452	0.009
9/12/2022	Dolichospermum/Microcystis (75/2	BFC	99.1		1.996074	1.478996	0.030

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022						
5/17/2022						
6/1/2022						
6/15/2022						
6/21/2022						
6/28/2022						
7/5/2022						
7/12/2022						
7/19/2022						
7/26/2022						
8/2/2022						
8/9/2022						
8/16/2022						
8/23/2022						
9/4/2022						
9/12/2022						

Thoreau's Cove

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	<50	0.1				
5/17/2022	<50					
6/1/2022	<50	1.69				
6/15/2022	<50					
6/21/2022	<50					
6/28/2022	<50	1.69				
7/5/2022	<50	1				
7/12/2022	<50	1.23				
7/19/2022	<50	1.47				
7/26/2022	<50	2.55				
8/2/2022	<50	0.1				
8/9/2022	<50	0.9				
8/16/2022	<50	1.69				
8/23/2022	<50	2.15				
9/4/2022	<50	1.23				
9/12/2022	<50	2.15				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	W:LW	0.1				
5/17/2022	W:LW					
6/1/2022	W:LW	1.23				
6/15/2022	W:LW					
6/21/2022	W:LW					
6/28/2022	W:LW	2.84		0.453138	1.861409	0.071
7/5/2022	W:LW	1.23		0.089905	1.444211	0.028
7/12/2022	W:LW	1.23		0.089905	1.444211	0.028
7/19/2022	W:LW	1.46				
7/26/2022	W:LW	2.15				
8/2/2022	W:LW	0.1				
8/9/2022	W:LW	1.62				
8/16/2022	W:LW	1.46				
8/23/2022	W:LW	2.15				
9/4/2022	W:LW	1.69				
9/12/2022	W:LW	1.92				

Dates		Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022		BFC	0.1				
5/17/2022		BFC					
6/1/2022	Dolichospermum (100%)	BFC	192.2				
6/15/2022	Dolichospermum (100%)	BFC	1064	0.122232	3.026942	2.031438	0.108
6/21/2022		BFC					
6/28/2022	Microcystis (95%)	BFC	49.76		1.69688	3.289019	1.945
7/5/2022	Microcystis (50%)	BFC	6.76		0.829947	2.250779	0.197
7/12/2022	Microcystis (95%)	BFC	55.11	0.299758	1.74123	3.339933	2.187
7/19/2022	Microcystis (95%)	BFC	24.18				
7/26/2022	Microcystis (995)	BFC	38.6	0.066818	1.586587	3.162402	1.453
8/2/2022	Microcystis (995)	BFC	23.72				
8/9/2022	Dolichospermum	BFC	34.72		1.54058	1.234897	0.017
8/16/2022	Dolichospermum	BFC	27.44		1.438384	1.18033	0.015
8/23/2022	Dolichospermin	BFC	14.4		1.158362	1.030066	0.011
9/4/2022	Dolichospermum	BFC	13.95		1.144574	1.022677	0.011
9/12/2022	Dolichospermum/Microcystis (75/2	BFC	74.8		1.873902	1.413524	0.026

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022						
5/17/2022						
6/1/2022						
6/15/2022						
6/21/2022						
6/28/2022						
7/5/2022						
7/12/2022						
7/19/2022						
7/26/2022						
8/2/2022						
8/9/2022						
8/16/2022						
8/23/2022						
9/4/2022						
9/12/2022						

Sachems Cove

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	<50					
5/17/2022	<50	0.1				
6/1/2022	<50					
6/15/2022	<50	1.69				
6/21/2022	<50					
6/28/2022	<50	1.39				
7/5/2022	<50	1.69				
7/12/2022	<50					
7/19/2022	<50	2.39				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	W:LW					
5/17/2022	W:LW	0.1				
6/1/2022	W:LW					
6/15/2022	W:LW	14.14		1.150449	1.025826	0.011
6/21/2022	W:LW					
6/28/2022	W:LW	2				
7/5/2022	W:LW	1.69				
7/12/2022	W:LW					
7/19/2022	W:LW	1.46				

Dates		Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022		BFC					
5/17/2022		BFC	0.1				
6/1/2022		BFC					
6/15/2022	Dolichospermum (100%)	BFC	2223		3.346939	2.202925	0.160
6/21/2022		BFC					
6/28/2022		BFC	35.3				
7/5/2022	Microcystis (50%)	BFC	7				
7/12/2022		BFC					
7/19/2022	Microcystis (95%)	BFC	16.97				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022						
5/17/2022						
6/1/2022						
6/15/2022						
6/21/2022						
6/28/2022						
7/5/2022						
7/12/2022						
7/19/2022						
7/26/2022						
8/2/2022						
8/9/2022						
8/16/2022						
8/23/2022						
9/4/2022						
9/12/2022						

Bold RED text denotes values less than 3 µg/L (Limit of Detection)