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	0.57					
6/28/2022	<50	3.53					
7/5/2022	<50	2.38					
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					

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	WLW							
5/17/2022	WLW							
6/1/2022	WLW							
6/15/2022	WLW	18.13		1.258386	1.083675	0.012		
6/21/2022	WLW	0.55		-0.25964	0.27016	0.002		
6/28/2022	WLW	8.15		0.911116	1.387009	0.244	0.316	0.04
7/5/2022	WLW	5.35		0.711807	2.158155	0.144	0.302	0.06
7/12/2022	WLW	1.46		0.164153	1.529077	0.034		
7/19/2022	WLW	1.23						
7/26/2022	WLW	2.01						
8/2/2022	WLW	0.1						
8/9/2022	WLW	1.46						

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)	PST (ug ug-1)
5/4/2022		BFC							
5/17/2022		BFC							
6/1/2022		BFC							
6/15/2022	Dolichaspermum (100%)	BFC	1554		3.191451	2.119599	0.132		
6/21/2022	Dolichaspermum (100%)	BFC	70		1.845098	1.196068	0.025		
6/28/2022	Microcystis (95%)	BFC	140.15		2.146593	1.805283	6.387	1.57	0.01
7/5/2022	Microcystis (50%)	BFC	20.69		1.33176	2.851493	0.730	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 (98%)	BFC	28.13		1.44917	3.004647	1.031		
8/2/2022	Microcystis (99%)	BFC	119.05	0.206101	2.075729	1.723937	5.296	0.990	0.01
8/9/2022	Dolichaspermum (95%)	BFC	57.44						

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	5.083562	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							
8/2/2022								
8/9/2022	Grab	30640					ATX 0.50 ug L-1	
8/9/2022	Sed 1	16120						
8/9/2022	Sed 2	181						
8/9/2022	Sed 3	67						

Deep 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)
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	2.36					
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	WLW	0.1						
5/17/2022	WLW	0.1						
6/1/2022	WLW							
6/15/2022	WLW	5.81		0.764176	0.818822	0.007		
6/21/2022	WLW							
6/28/2022	WLW	1.69		0.227887	1.602614	0.040	0.277	0.16
7/5/2022	WLW	3.53		0.547775	1.969845	0.033		
7/12/2022	WLW	1		0	1.341	0.022		
7/19/2022	WLW	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	BFC	90.46	0.482249					
6/15/2022	Dolichaspermum (100%)	BFC	585.7	0.133421	2.767675	1.892497	0.078		
6/21/2022	Dolichaspermum (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	0.302		
7/12/2022	Microcystis (95%)	BFC	22.84	0.080184	1.358696	2.900783	0.796		
7/19/2022	Microcystis (95%)	BFC	29.76	0.037807	1.473633	3.032731	1.078		
		BFC							
		BFC							
		BFC							

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)

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	1.64				
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				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)	
5/4/2022	WLW	0.1					
5/17/2022	WLW	0.1					
6/1/2022	WLW						
6/15/2022	WLW	9.68		0.985875	0.937031	0.009	
6/21/2022	WLW						
6/28/2022	WLW	1.23		0.089905	1.444211	0.028	
7/5/2022	WLW	1.69		0.227887	1.602614	0.040	
7/12/2022	WLW	1.23		0.089905	1.444211	0.028	
7/19/2022	WLW	1.46					
7/26/2022	WLW	5.81					
8/2/2022	WLW	1					
8/9/2022	WLW	2.13					

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	Dolichaspermum (100%)	BFC	167.2	0.530127		
6/15/2022	Dolichaspermum (100%)	BFC	1682	0.168896	3.225826	2.13802
6/21/2022		BFC				
6/28/2022	Microcystis (95%)	BFC	26.97		1.430881	2.983651
7/5/2022	Microcystis (50%)	BFC	32.32		1.509471	3.073873
7/12/2022	Microcystis (95%)	BFC	49.75	0.061618	1.696793	3.288918
7/19/2022	Microcystis (95%)	BFC	19.53			
7/26/2022	Microcystis (995)	BFC	51.86	0.139514	1.754833	3.309628
8/2/2022	Microcystis (995)	BFC	68.83	0.046442	1.837778	3.450769
8/9/2022		BFC	52.22		1.717837	3.313077

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)

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	3				
7/12/2022	<50	1.23				
7/19/2022	<50	1.97				
7/26/2022	<50	2.15				
8/2/2022	<50	0.1				
8/9/2022	<50	0.9				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)
5/4/2022	WLW	0.1				
5/17/2022	WLW					
6/1/2022	WLW	1.23				
6/15/2022	WLW					
6/21/2022	WLW					
6/28/2022	WLW	2.84		0.453138	1.861409	0.073
7/5/2022	WLW	1.23		0.089905	1.444211	0.028
7/12/2022	WLW	1.23		0.089905	1.444211	0.028
7/19/2022	WLW	1.45				
7/26/2022	WLW	2.15				
8/2/2022	WLW	0.1				
8/9/2022	WLW	1.62				

Dates	Composition & Dominance	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	Dolichaspermum (100%)	BFC	192.2				
6/15/2022	Dolichaspermum (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	2.293779	0.197
7/12/2022	Microcystis (95%)	BFC	55.11	0.399758	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		BFC	34.72				

Dates	Sample Type	PC (ug L-1)	Growth rate	MC estimate: Log PC	Log MC	MC (ug L-1)

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	1.35				
7/5/2022	<50	1.69				
7/12/2022	<50					
7/19/2022	<50	2.38				

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

Dates	Composition & Dominance	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	Dolichaspermum (100%)	BFC	2223		3.346539	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)

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