Table S1. Density (Nº Cells/mL) of the phytoplankton taxa identified in each reservoir and sampling campaign.

Reservoir	**Flamengos**				**Saquinho**			**Figueira Gorda**					**Faveta**			**Poilão**			
Taxon	**Dec17**	**Oct18**	**Feb20bP**	**Feb20sP**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**	**Feb20**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**
Actinastrum hantzschii Lagerheim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	464
Anabaena sp.	0	0	0	0	0	0	0	0	0	0	0	0	7,063	0	0	0	0	0	0
Anabaenopsis elenkinii V.V.Miller	0	920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anabaenopsis sp.	0	0	0	0	0	160,021	0	0	0	0	0	0	0	0	0	0	0	0	0
Ankyra judayi (G.M.Smith) Fott	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Aphanizomenon aphanizomenoides (Forti) Hortobágyi & Komárek	0	0	0	0	0	0	0	0	0	0	0	0	247,241	100,923	0	0	369,098	0	0
Aphanizomenon manguinii Bourrelly	0	0	0	0	0	0	0	0	939,863	0	83,086	0	6,026	0	0	0	0	0	0
Aphanizomenon sp.	26,469	330	0	0	24	0	0	0	0	11,561	0	259	98,021	0	0	0	4,910	337,763	0
Aphanocapsa sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulacoseira granulata (Ehrenberg) Simonsen	0	0	0	0	2,634	0	8,726	67	0	0	0	0	357	0	0	0	0	0	0
Caloneis bacillum (Grunow) Cleve	0	0	744	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closterium acutum Brébisson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134	0
Coelastrum astroideum De Notaris	536	928	0	0	0	0	1,607	0	0	0	0	0	0	0	0	0	0	0	20,818
Coelastrum cambricum W.Archer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	429
Coelastrum microporum Nägeli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	714	0	2,071
Coelastrum reticulatum (P.A.Dangeard) Senn	0	0	0	0	0	0	0	0	0	0	0	0	714	0	0	0	0	0	0
Coelosphaerium sp.	0	576,827	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cosmarium sp.	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	89	0	0	18
Crucigenia quadrata Morren	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0
Crucigenia tetrapedia (Kirchner) Kuntze	0	0	0	0	45	0	0	0	0	0	0	0	17,364	0	0	45	250	0	0
Crucigeniella crucifera (Wolle) Komárek	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0
Cryptomonas curvata Ehrenberg	0	0	0	0	4,553	0	0	0	0	0	0	0	0	0	0	0	0	45	0

Reservoir	Flamengos				Saquinho			Figueira Gorda					Faveta			Poilão			
Taxon	**Dec17**	**Oct18**	**Feb20bP**	**Feb20sP**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**	**Feb20**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**
Cryptomonas erosa Ehrenberg	45	0	0	0	22,786	46	4,464	134	179	1,116	0	0	3,794	357	1,893	1,785	0	4,687	0
Cryptomonas marssonii Skuja	0	36	0	0	447	18	0	0	0	0	0	0	0	0	0	0	36	0	0
Cryptomonas ovata Ehrenberg	0	366	0	0	0	0	0	0	0	0	45	31	0	0	0	0	3,491	0	0
Cuspidothrix sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,275,484	0
Cyclotella meneghiniana Kützing	0	0	60	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclotella sp.	0	0	0	0	0	0	17,497	0	0	0	0	0	0	0	0	0	0	0	0
Dictyosphaerium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	286
Dolichospermum spiroides (Klebhan) Wacklin, L.Hoffmann & Komárek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000
Eolimna subminuscula (Manguin) Gerd Moser, Lange-Bertalot & Metzeltin	0	0	387	24	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0
Euglena sp.	357	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fragilaria sp.	0	0	0	0	268	0	491	0	0	0	0	0	0	15	661	0	0	402	0
Frustulia sp.	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gloeocapsa sp.	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gomphonema sp.	0	36	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	9
Gonium sociale (Dujardin) Warming	0	0	0	0	0	0	268	0	0	0	0	0	0	0	0	0	0	0	0
Gymnodinium sp.	0	0	0	0	782	0	22	0	0	0	0	0	0	15	0	0	45	1,294	0
Gyrosigma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89	0	0	0
Jaaginema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	973
Kirchneriella sp.	90,478	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Komma caudata (L.Geitler) D.R.A.Hill	0	0	60	12	0	0	0	0	0	0	0	22	2,053	0	0	0	0	0	0
Lagerheimia ciliata (Lagerheim) Chodat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lepocinclis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214	0	0
Leptolyngbya sp.	0	0	0	0	0	0	0	0	0	0	33,120	0	0	0	0	0	0	0	0
Merismopedia tenuissima Lemmermann	0	893	0	0	0	114	536	268	0	0	0	0	1,071	179	0	41,601	126	0	0
Microcystis sp.	0	0	0	0	6,461,952	5,183,352	0	0	413,511	2,000,000	0	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monoraphidium arcuatum (Korshikov) Hindák	1,339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Reservoir	Flamengos				Saquinho			Figueira Gorda					Faveta			Poilão			
Taxon	**Dec17**	**Oct18**	**Feb20bP**	**Feb20sP**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**	**Feb20**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**
Monoraphidium contortum (Thuret) Komárková-Legnerová	0	0	0	0	0	0	22	0	0	0	0	13	0	15	286	0	2,250	0	0
Monoraphidium griffithii (Berkeley) Komárková-Legnerová	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89	0	0	0	0
Monoraphidium komarkovae Nygaard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,310	45	670	0
Monoraphidium litorale Hindák	0	0	0	0	0	0	0	0	0	179	0	0	0	0	0	0	0	0	0
Monoraphidium minutum (Nägeli) Komárková-Legnerová	0	0	0	0	0	0	45	89	0	89	0	0	0	0	482	0	0	0	0
Monoraphidium tortile (West & G.S.West) Komárková-Legnerová	0	4,535	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Muriellopsis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27,282	0	0	0	0
Navicula sp.	0	0	0	0	45	0	112	0	112	0	0	0	134	0	0	0	18	0	0
Navicula veneta Kützing	0	0	119	42	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0
Nephrochlamys sp.	0	0	0	0	0	0	45	0	179	0	0	0	0	0	0	4,151	250	0	0
Nitzschia inconspicua Grunow	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia palea (Kützing) W.Smith	0	0	625	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitzschia sp.	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0
Oocystis marssonii Lemmermann	0	0	0	0	0	0	0	670	0	0	0	0	714	0	0	0	0	0	9
Oscillatoria limosa C.Agardh ex Gomont	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32,094	0
Pandorina morum (O.F.Müller) Bory	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pediastrum simplex Meyen	0	0	0	0	357	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pediastrum tetras (Ehrenberg) Ralfs	0	1,062	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peridinium sp.	89	0	0	0	0	0	134	201	0	45	0	0	1,518	0	0	5,267	491	223	0
Phormidium sp.	0	0	0	256	0	28,700	0	0	0	0	0	0	0	0	0	0	0	0	0
Planktolyngbya limnetica (Lemmermann) Komárková-Legnerová & Cronberg	1,036,813	47,136	0	0	0	0	647	0	0	487,831	0	0	0	0	4,660	0	0	0	0
Planktolyngbya sp.	0	0	0	119	0	0	0	0	0	0	0	2,687	0	295,560	0	0	62,937	0	0
Planktothrix agardhii (Gomont) Anagnostidis & Komárek	0	0	0	0	0	0	0	647	0	2,901	0	0	0	0	0	0	0	0	0
Planktothrix isothrix (Skuja) Komárek & Komárková	0	0	0	0	0	0	0	0	0	0	0	0	357	0	0	0	0	0	0
Quadricoccus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	286	0	0	0	0

Reservoir	Flamengos				Saquinho			Figueira Gorda					Faveta			Poilão			
Taxon	**Dec17**	**Oct18**	**Feb20b**	**Feb20sP**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**	**Feb20**	**Jun16**	**May17**	**Dec17**	**Jun16**	**May17**	**Dec17**	**Oct18**
Raphidiopsis sp.	0	0	0	0	0	0	0	1,071	0	0	0	0	0	0	0	22,050	0	16,783	0
Scenedesmus acuminatus (Lagerheim) Chodat	0	0	0	0	3,303	0	0	0	0	0	0	0	0	0	0	0	0	0	107
Scenedesmus acutus Meyen	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	571
Scenedesmus bicaudatus Dedusenko	0	0	0	0	0	0	312	0	0	312	0	0	0	0	0	0	0	0	0
Scenedesmus communis E.Hegewald	803	1,768	238	0	0	21	357	0	45	536	0	0	179	0	0	0	0	0	1,384
Scenedesmus ecornis (Ehrenberg) Chodat	0	0	0	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	0
Scenedesmus opoliensis P.G.Richter	0	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	0	0	0
Scenedesmus subspicatus Chodat	0	161	0	0	0	0	89	0	0	0	0	36	0	0	0	0	0	0	0
Schroederia setigera (Schröder) Lemmermann	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000
Sellaphora seminulum (Grunow) D.G.Mann	0	0	357	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirulina major Kützing ex Gomont	0	0	0	0	0	0	0	0	0	536	0	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	491	0	0	0	0	0	0	0	0	0	643	0	0	0	0
Staurastrum sp.	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0
Tetraedron minimum (A.Braun) Hansgirg	83,649	161	30	0	0	4	3,415	16,627	112	3,883	18	0	19,283	640	0	40,798	1,294	268	0
Tetrastrum triangulare (Chodat) Komárek	0	0	0	0	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0
Trachelomonas volvocina (Ehrenberg) Ehrenberg	0	27	208	0	0	4	112	0	0	0	0	0	0	0	0	0	0	179	0
Tryblionella apiculata W.Gregory	0	0	179	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ulnaria ulna (Nitzsch) Compère	0	0	0	0	67	0	89	134	0	0	0	0	0	15	0	45	0	0	0
Ulothrix sp.	0	0	0	0	2,053	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westella sp.	0	0	0	0	0	0	357	0	0	0	0	0	0	0	0	0	0	0	0
Total	***1,240,623***	***635,517***	***3,067***	***614***	***6,499,807***	***5,372,280***	***39,525***	***19,930***	***1,354,112***	***2,000,000***	***116,269***	***3,079***	***405,889***	***397,734***	***36,282***	***131,230***	***446,169***	***70,670***	***29,166***

Table S2. Percentage breakdown of average dissimilarity among reservoirs, and sampling campaigns, using SIMPER analysis. Statistical and global R values for the pairwise analysis of similarity (ANOSIM) tests are presented, *** p<0.001 and *p<0.05 were considered significant.

Factors	Groups	Average similarity (%)	Average dissimilarity (%)	ANOSIM (statistical R)	ANOSIM (Global R)
Reservoir	Faveta	19.87%	FV/FG = 81.42%	-0.108	0.074
	Figueira Gorda	15.28%	FV/PO = 79.71%	-0.056	
	Poilão	17.96%	FV/SA = 78.42%	0.074	
	Saquinho	23.87%	FV/FL = 88.63%	0.259	
	Flamengos	18.27%	FG/PO = 85.38%	0.047	
			FG/SA = 81.95%	-0.026	
			FG/FL = 86.08%	0.019	
			PO/SA = 83.22%	0.167	
			PO/FL = 87.73%	0.130	
			SA/FL = 88.21%	0.315	
Month	February	7.83%	Feb/Jun = 99.95%	1.000*	0.556***
	May	8.57%	Feb/May = 99.76%	0.778*	
	June	6.95%	May/Dec = 96.43%	0.444*	
	October	0.26%	May/Oct = 99.01%	0.435*	
	December	4.36%	Jun/May = 88.36%	0.083	
			Oct/Feb = 99.81%	0.630	
			Oct/Jun = 99.73%	0.676*	
			Oct/Dec = 98.87%	0.554*	
			Dec/Feb = 99.85%	1.000*	
			Dec/Jun = 95.18%	0.131	

Table S3. Indicator taxa of the sampling months. Average abundance, average similarity, % of contribution and accumulative % are presented for the indicator taxa of each sampling month.

Month	Taxon	Average Abundance	Average Similarity	Contrib. %	Acumum. %
June 2016	*Tetraedron minimum*	19,177.00	6.16	88.65	88.65
	Raphidiopsis sp.	5,780.25	0.24	3.40	92.04
May 2017	*Aphanizomenon aphanizomenoides*	117,505.25	3.99	46.54	46.54
	Planktolyngbya sp.	89,624.25	2.49	29.02	75.56
	Microcystis sp.	1,399,215.75	2.05	23.92	99.48
December 2017	*Planktolyngbya limnetica*	305,990.20	3.14	72.20	72.2
	Cryptomonas erosa	2,441.00	0.60	13.81	86.02
	Aphanizomenon sp.	75 158.60	0.31	7.10	93.11
October 2018	*Scenedesmus communis*	1,050.67	0.14	53.05	53.05
	Coelastrum astroideum	7,248.67	0.09	35.57	88.63
	Scenedesmus acutus	261.67	0.02	8.20	96.83
February 2020	*Planktolyngbya* sp.	935.33	2.15	27.44	27.44
	Navicula veneta	59.67	1.28	16.36	43.81
	Caloneis bacillum	269.67	1.18	15.04	58.84
	Nitzschia palea	224.33	0.87	11.11	69.95
	Eolimna subminuscula	141.33	0.81	10.35	80.30
	Komma caudata	31.33	0.67	8.59	88.89
	Tryblionella apiculata	71.67	0.65	8.33	97.22

Table S4. Cyanobacteria taxa, cell density (Cell/mL), and relative abundance of each taxa identified in each reservoir (%). In bold, samples with relative abundance greater than 50%, are identified.

Faveta reservoir		
Cyanobacteria Taxa	**Cell,Density (cells/mL)**	**Relative Abundance for the month of occurrence (%)**
Anabaena sp.	7,063	1.7 (June 2016)
Aphanizomenon aphanizomenoides	247,241	**60.9 (June 2016)**
	100,923	25.4 (May 2017)
Aphanizomenon manguinii	6,026	1.5 (June 2016)
Aphanizomenon sp.	98,021	24.0 (June 2016)
Merismopedia tenuissima	1,071	0.26 (June 2016)
	179	0.045 (May 2017)
Planktolyngbya limnetica	4,660	12.8 (December 2017
Planktolyngbya sp.	295,560	**74.3 (May 2017)**
Planktothrix isothrix	357	0.1 (June 2016)
Spirulina sp.	643	1.8 (December 2017)
Figueira Gorda reservoir		
Cyanobacteria Taxa	**Cell Density (cells mL/1)**	**Relative Abundance for the month of occurrence (%)**
Aphanizomenon manguinii	939,863	69.4 (May 2017)
	83,086	**71.4 (October 2018)**
Aphanizomenon sp.	11,561	0.5 (December 2017)
	256	8.4 (February 2020)
Leptolyngbya sp.	33120	28.5 (October 2018)
Merismopedia tenuissima	268	0.02 (June 2016)
Microcystis sp.	413,511	30.5 (May 2017)
	1,681,630	**76.8 (December 2017)**
Planktolyngbya limnetica	487,831	22.3 (June 2016)
Planktolyngbya sp.	2,687	**87.3 (February 2020)**
Planktothrix agardhii	647	3.2 (June 2016)
	2,901	0.13 (December 2017)
Raphidiopsis sp.	1,071	5.4 (June 2016)
Spirulina major	536	0.02 (December 2017)
Poilão reservoir		
Cyanobacteria Taxa	**Cell Density (cells/mL)**	**Relative Abundance for the month of occurrence (%)**
Aphanizomenon aphanizomenoides	369,098	**82.73 (May 2017)**
Aphanizomenon sp.	4,910	1.1 (May 2017)
	337,763	20.2 (December 2017)
Cuspidothrix sp.	1,275,484	**76.4 (December 2017)**
Dolichospermum spiroides	1,000	3.43 (October 2018)
Jaaginema sp.	973	3.34 (October 2018)
Merismopedia tenuissima	41,601	31.7 (June 2016)
Oscillatoria limosa	32,094	1.92 (December 2017)
Planktolyngbya sp.	62,937	14.11 (May 2017)
Raphidiopsis sp.	22,050	16.80 (June 2016)
	16,783	1.0 (December 2017)
Saquinho reservoir		
Cyanobacteria Taxa	**Cell Density (cells/mL)**	**Relative Abundance for the month of occurrence (%)**

Anabaenopsis sp.	160,021	3.0 (May 2017)
Aphanizomenon sp.	24	0.0004 (June 2016)
Merismopedia tenuissima	114	0.002 (May 2017)
	536	1.4 (December 2017)
Microcystis sp.	6,461,952	**99.4 (June 2016)**
	5,183,352	**96.5 (May 2017)**
Phormidium sp.	28,700	0.5 (May 2017)
Planktolyngbya limnetica	647	1.6 (December 2017)
Spirulina sp.	491	0.01 (June 2016)
Flamengos reservoir		
Cyanobacteria Taxa	**Cell Density (cells/mL)**	**Relative Abundance for the month of occurrence (%)**
Anabaenopsis elenkinii	920	0.1 (October 2018)
Aphanizomenon sp.	26,469	21 (December 2017)
	330	0.05 (October 2018)
Coelosphaerium sp.	576,827	**90.8 (October 2018)**
Gloeocapsa sp.	36	0.01 (October 2018)
Merismopedia tenuissima L	893	0.1 (October 2018)
Phormidium sp.	256	41.7 (February 2020)
Planktolyngbya limnetica	1,036,813	**83.6 (December 2017)**
	47,136	7.4 (October 2018)
Planktolyngbya sp.	119	19.4 (February 2020)