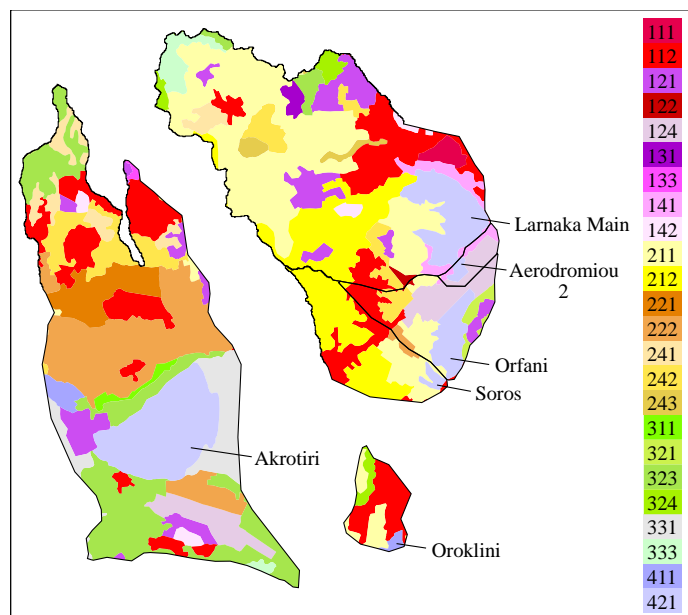
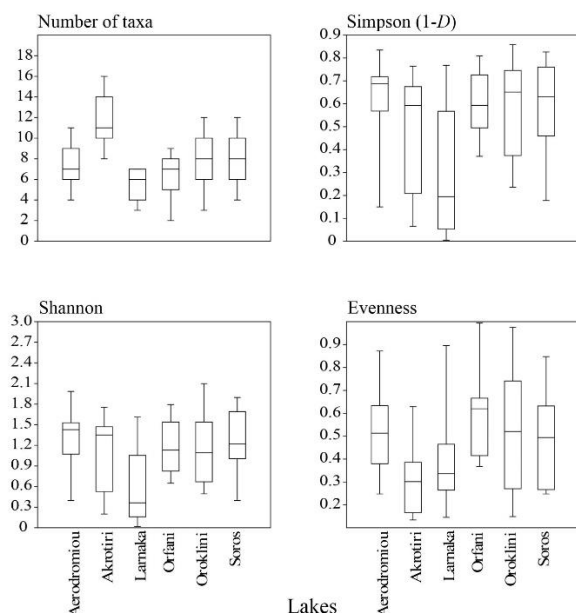


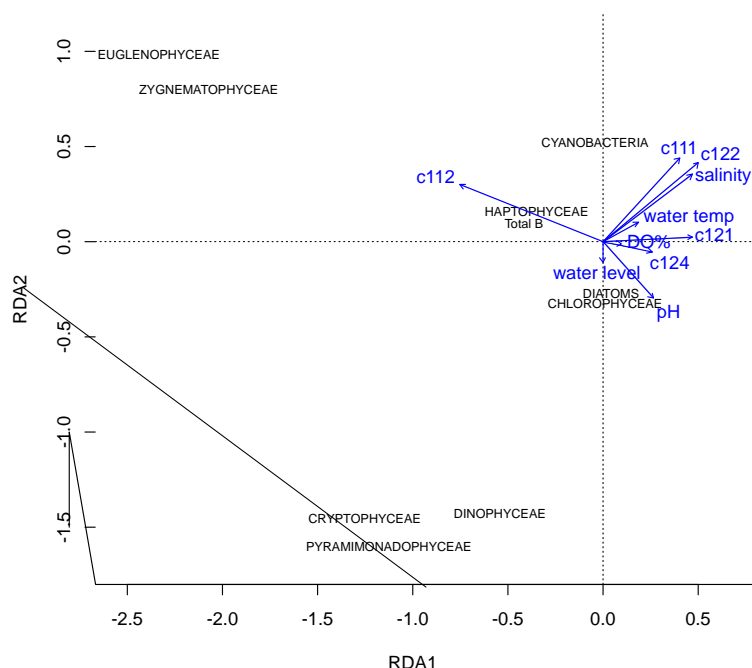
## Supplementary Materials:



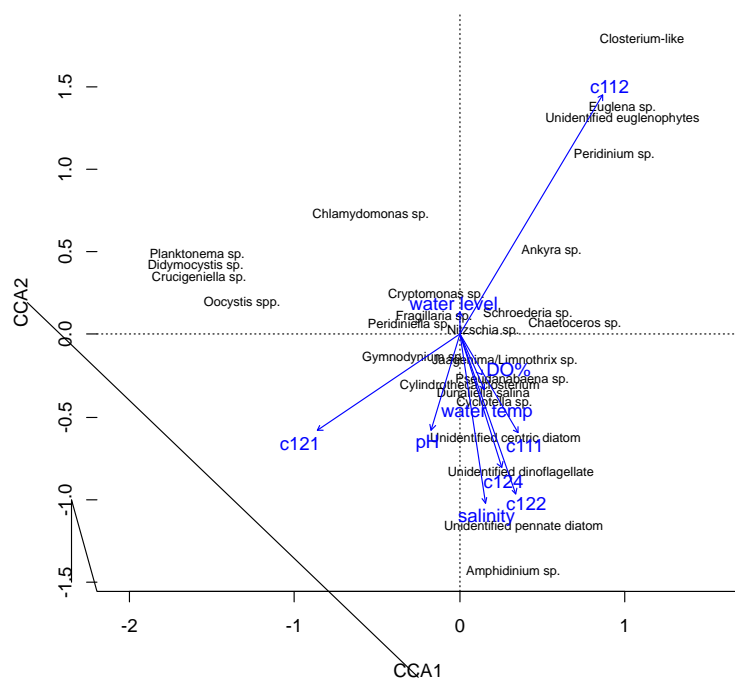
**Supplementary Figure S1.** Land use coverage of Akrotiri, Larnaka's network of lakes (each lake's catchment is defined by the black line) and Oroklini lake catchments (111: Continuous urban fabric, 112: Discontinuous urban fabric, 121: Industrial or commercial units, 122: Road and rail networks and associated land, 124: Airports, 131: Mineral extraction sites, 133: Construction sites, 141: Green urban areas, 142: Sport and leisure facilities, 211: Non-irrigated arable land, 212: Permanently irrigated land, 221: Vineyards, 222: Fruit trees and berry plantations, 241: Annual crops associated with permanent crops, 242: Complex cultivation patterns, 243: Land principally occupied by agriculture, with significant areas of natural vegetation, 311: Broad-leaved forest, 321: Natural grasslands, 323: Sclerophyllous vegetation, 324: Transitional woodland-shrub, 331: Beaches, dunes, sands, 333: Sparsely vegetated areas, 411: Inland marshes, 421: Salt marshes). Relative positions of catchments do not represent their true positions.



**Supplementary Figure S2.** Boxplots of the number of taxa (S), and the Simpson (1-D), Shannon (H) and Evenness (eH/S) indices in the lakes throughout the study. Mid-line: median, box limits: first and third quartiles, whiskers: one sigma.



**Supplementary Figure S3.** Constrained ordination plot (linear RDA) of explanatory variables (environmental factors and land use coverage) over phytoplankton taxonomic group biomass. Ordination axes 1 (horizontal) and 2 (vertical) are shown. Land use coverage codes: c111: continuous urban fabric, c112: discontinuous urban fabric, c121: industrial or commercial units, c122: road and rail networks and associated land, c124: airports.



**Supplementary Figure S4.** Constrained ordination plot (unimodal CCA) of explanatory variables (environmental factors and land use coverage) over phytoplankton dominant species biomass. Ordination axes 1 (horizontal) and 2 (vertical) are shown. Land use coverage codes: c111: continuous urban fabric, c112: discontinuous urban fabric, c121: industrial or commercial units, c122: road and rail networks and associated land, c124: airports.

**Supplementary Table S1.** *In situ* measurements of physico-chemical parameters (water level, water temperature, salinity, electrical conductivity, dissolved oxygen and pH).

Lake	Date	Water level (m)	Water temp. (°C)	Salinity (psu, ‰)	El. cond. (μS/cm)	DO (mg/L)	pH
Aerodromiou 2	08/02/18	0.34	16.4	33.6	51700	10.23	8.91
	27/02/18	0.38	18	29.1	45300	13.18	8.73
	20/03/18	0.30	21.4	39.3	59300	11.81	9.67
	12/04/18	0.19	22	59.5	84300	9.80	8.87
	11/12/18	0.40	16.6	16.1	26700	12.79	9.24
	08/01/19	0.40	11.8	10.2	12876	14.84	8.90
	30/01/19	0.34	13.6	16.6	21077	5.86	8.14
	20/02/19	0.47	17	15.2	21000	7.60	8.53
	13/03/19	0.56	17.7	24	32450	5.02	8.49
	03/04/19	0.59	16.5	27.5	35777	8.01	8.37
	08/05/19	0.52	23.9	37.7	55221	6.97	8.71
	05/06/19	0.36	27.1	63.4	92600	4.79	8.35
	03/07/19	0.18	30.6	133.9	166980	2.33	7.82
Akrotiri	07/02/18	0.17	17	38.6	58400	9.68	8.20
	28/02/18	0.35	19.2	29.4	45700	9.09	8.07
	22/03/18	0.29	20	35.8	54400	9.45	8.37
	11/04/18	0.26	19.5	42.8	63900	8.86	8.27
	02/05/18	0.13	23.9	55.9	79700	9.25	8.49
	15/05/18	0.11	25	71.4	97200	8.88	7.95
	09/01/19	0.38	8.7	18.5	20733	8.77	8.11
	29/01/19	0.61	13.8	19.5	24384	6.68	8.18
	19/02/19	0.87	13.8	15.8	20238	6.53	8.11
	12/03/19	0.92	16.4	16.7	22589	6.54	8.47
	02/04/19	0.97	15.5	13.8	10705	7.20	8.10
	07/05/19	0.83	21.3	20	29637	5.81	9.11
	04/06/19	0.71	28	24.3	40500	4.73	8.85
	02/07/19	0.54	27.2	31.9	51300	4.85	8.21
Larnaka Main	08/02/18	0.29	16.6	151.5	165400	9.45	7.90
	27/02/18	0.40	17	98.6	133400	3.78	7.67
	20/03/18	0.35	20.4	107.4	157500	6.72	7.59
	12/04/18	0.29	21.6	199.5	187000	6.43	7.35
	03/05/18	0.14	27.6	275	214000	10.84	7.31
	16/05/18	0.11	27.8	323	210000	8.34	7.44
	11/12/18	0.28	16.4	89.04	118200	10.38	8.45
	08/01/19	0.55	12	72	74500	10.35	8.55
	30/01/19	0.59	13.1	66.1	71650	3.91	7.88
	20/02/19	0.89	14.5	43.6	51986	6.36	8.02
	13/03/19	0.86	18.1	44.5	56808	6.24	8.19
	03/04/19	0.95	16.5	43.3	53491	7.17	8.03
	08/05/19	0.99	20.5	50	66170	4.13	8.81
	05/06/19	0.80	26.6	59	86475	3.51	8.89
	03/07/19	0.62	28.9	85.5	116767	3.86	8.63
Orfani	08/02/18	0.17	16.4	83.6	107000	9.33	8.14
	27/02/18	0.20	18.3	72.8	101300	10.39	8.13
	11/12/18	0.22	17.8	42.7	63900	10.45	8.20
	08/01/19	0.50	11.4	30.7	35122	8.23	8.18
	30/01/19	0.58	13.6	32.4	38702	6.19	8.12

	20/02/19	0.77	16.4	25.8	33680	7.13	8.17
	13/03/19	0.75	18.6	21.4	29807	7.74	8.58
	03/04/19	0.70	17	30.7	39990	7.52	7.89
	08/05/19	0.60	21.7	39.1	55001	8.25	8.20
	05/06/19	0.44	28.5	57.5	87645	3.84	8.33
	03/07/19	0.25	31.4	120.67	154300	4.5	7.95
Oroklini	06/02/18	0.40	16.1	6.4	11310	9.71	8.52
	22/02/18	0.50	15.1	5.3	9510	9.46	8.39
	20/03/18	0.40	18	20.4	10940	8.20	6.20
	12/04/18	0.50	20.9	6.8	11870	8.97	8.09
	03/05/18	0.48	23.6	7.95	13780	9.20	8.40
	14/06/18	0.45	28.5	16.5	26700	10.97	8.78
	12/12/18	0.48	13.6	7.4	13050	5.97	8.22
	10/01/19	0.38	11.5	4.7	6187	6.97	8.08
	30/01/19	0.37	15.2	5.3	7641	6.41	7.91
	20/02/19	0.37	17.6	3	4810	6.5	7.86
	13/03/19	0.45	20.3	4	6586	4.35	7.74
	03/04/19	0.70	19.7	3.1	5110	9.23	8.02
	09/05/19	0.68	22.2	5.3	8914	9.94	9.59
	05/06/19	0.64	27	7.4	13126	8.31	9.21
	03/07/19	0.62	29.8	8.1	15372	7.84	8.20
Soros	08/02/18	0.19	17	161.7	144500	14.44	8.42
	27/02/18	0.25	18.3	108.2	133000	9.52	7.59
	20/03/18	0.19	24.6	114.2	158600	9.15	7.50
	11/12/18	0.50	17.93	33.2	51300	9.78	8.04
	08/01/19	0.80	12.2	24.4	29009	9.20	8.54
	30/01/19	0.86	13.8	24.8	30593	6.01	8.22
	20/02/19	1.10	16.1	19.7	26148	7.96	8.44
	13/03/19	1.08	18.8	28.3	38300	6.197	8.18
	03/04/19	0.95	17.3	22.5	30575	9.09	9.12
	08/05/19	0.90	22.6	27.3	40017	8.66	9.75
	05/06/19	0.71	28.5	35	56844	5.65	9.16
	03/07/19	0.52	29.9	51.8	82082	5.84	8.36