Supplementary Figures and Tables

Figure S1. (**a**) Temperature (°C), (**b**) dissolved oxygen (mg/L), and (**c**) chlorophyll-a profiles collected at 0.5m increments in the west (*left*), center (*middle*), and east (*right*) sampling locations throughout summer 2017. Profile depths at each site were standardized to the dam stage elevation (m) at the time of sampling and illustrate both the differences in bottom depth and reservoir drawdown during the sampling campaign.

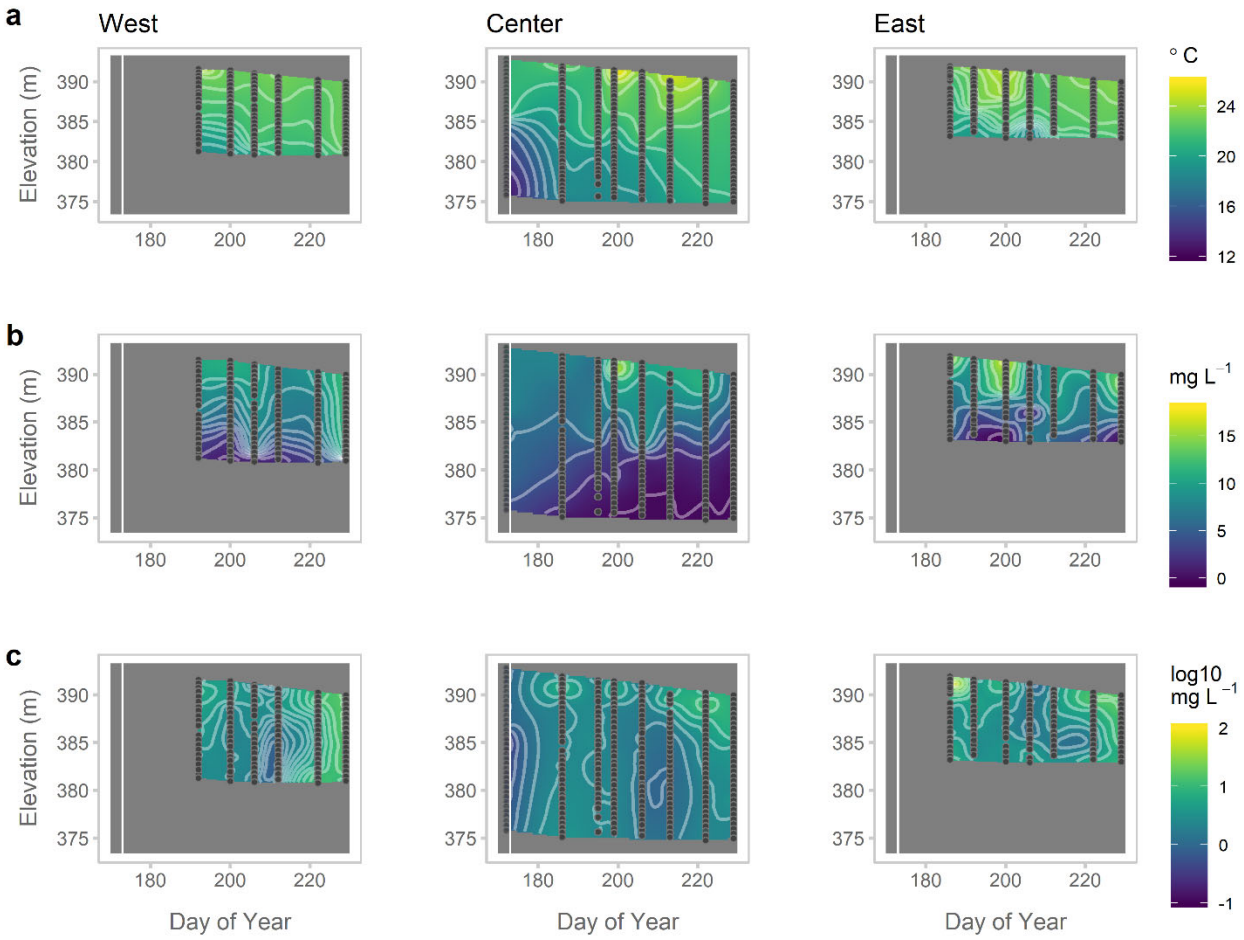

Figure S2. Principle coordinates analysis of epilimnetic (0-2 m) chemical (TDN, NO_3-N, DOC, SRP, TDP, TP, SO_4^{2-}, Mn, Ca^{2+}, K^+, Na^+, Mg^{2+}, F^-, Cl^-) and physical (surface temperature, dissolved oxygen, residence time) properties by site (West [clw], Center [clc], East [cle]) using Euclidean distances.

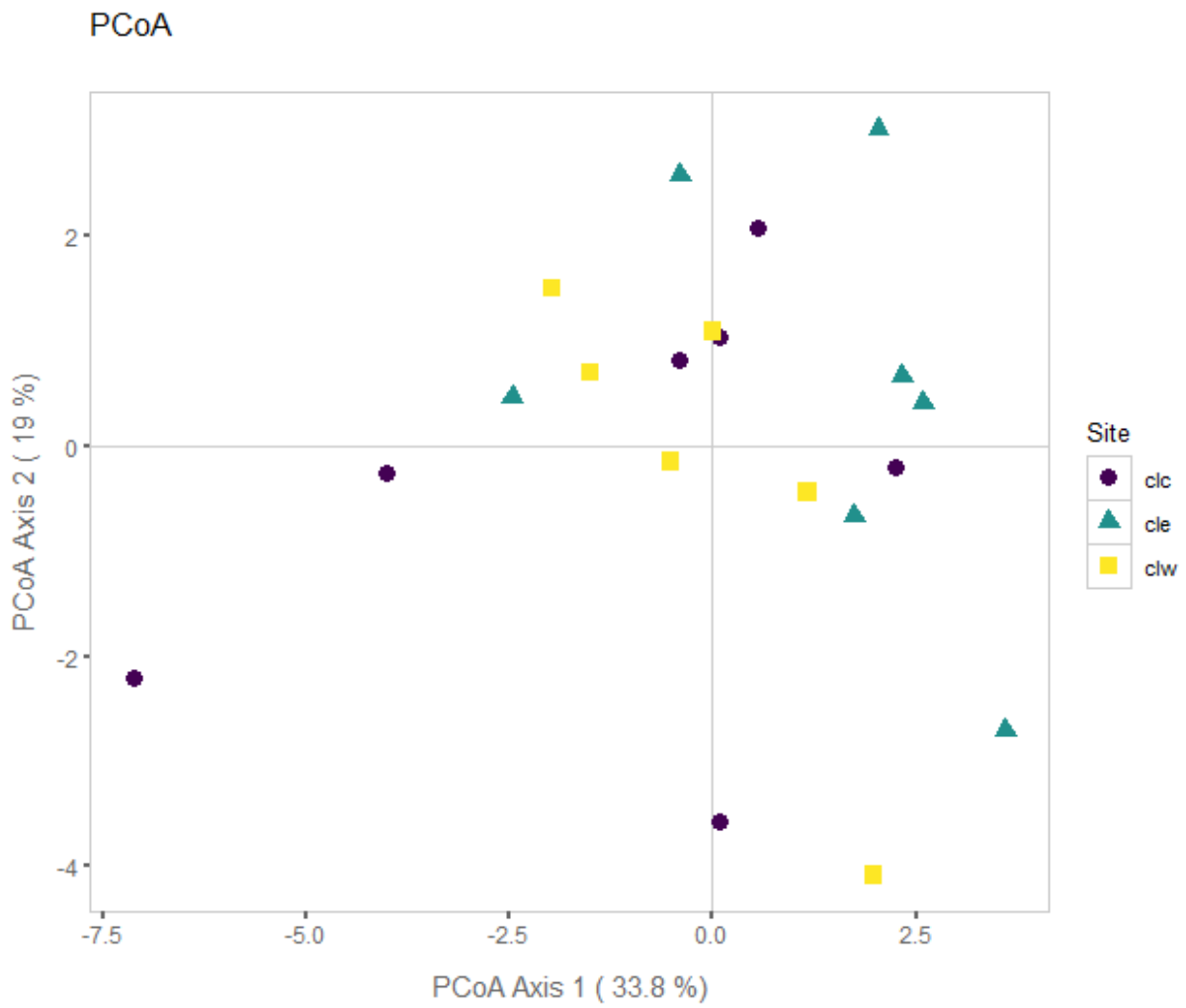

Figure S3. Principle coordinates analysis of phytoplankton communities using Bray-Curtis dissimilarity at the three sampling (green: West [clw], purple: Center [clc], blue: East [cle]) locations throughout the campaign. Each label corresponds to the day of year the sample was collected on.

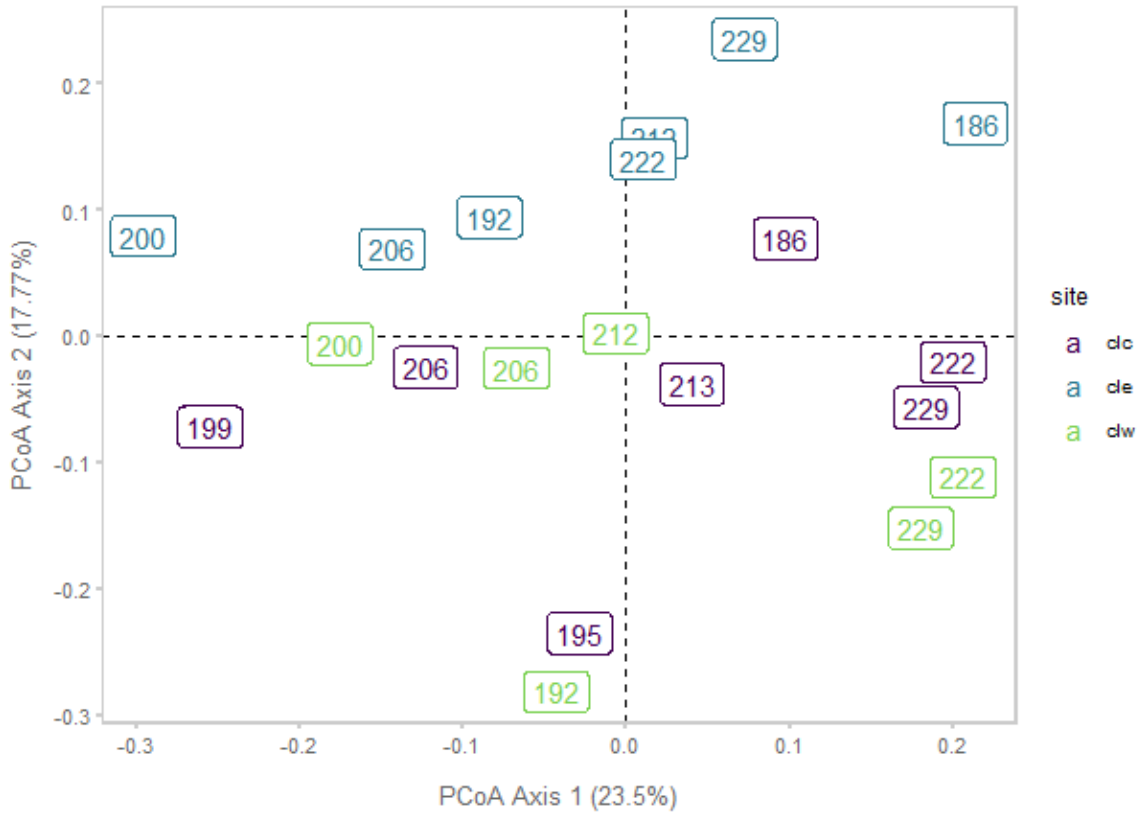

Figure S4. Phytoplankton community biomass by phylum in the west, center, and east sampling locations over the 2017 sampling campaign.

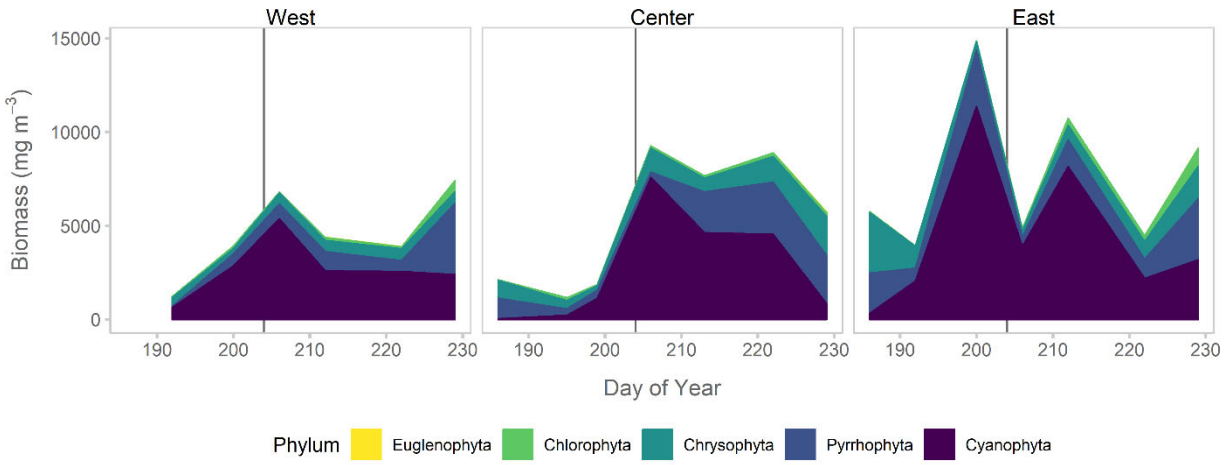

Table S1 Water chemistry instruments, detection limits, and analytes used in this study.

Analyte	Abbr.	Unit	Instrument	Detection Limit
Soluble Reactive Phosphorus	SRP	µg-P/L	Cary 100 UV-Vis spectrophotometer	0.5 µg-P/L
Total Dissolved Phosphorus	TDP	µg-P/L	Cary 100 UV-Vis spectrophotometer	0.5 µg-P/L
Total Phosphorus	TP	µg-P/L	Cary 100 UV-Vis spectrophotometer	0.5 µg-P/L
Ammonium	NH_4-N	mg-N/L	Westco Smartchem Analyzer	0.02 mg-N/L
Dissolved Organic Carbon	DOC	mg/L	Shimadzu TOC-L analyzer	0.05 mg/L
Total Dissolved Nitrogen	TDN	mg-N/L	Shimadzu TN-L analyzer	0.02 mg-N/L
anions (NO_3-N, Cl^-, F^-, SO_4^-)		mg/L	Dionex Ion Chromatogram ICS-200	NO_3-N: 0.02 mg-N/L Others: 0.1 mg/L
Cations (Fe, Mg^{2+}, Mn^+, Ca^{2+}, K^+)		mg/L	Perkin Elmer Optima 8000 ICP-OES	0.1 mg/L

Table S2 Cyanobacterial metabolite standards used in this study.

Compound	Abbreviation	Manufacturer	Catalogue Number
Anatoxin-a	ATX	Enzo Life Science	BML-C118-0001
Homoanatoxin-a	HATX	Abraxis	142926-86-1
Cylindrospermopsin	CYN	Enzo Life Science	ALX-350-149-C025
Microcystin-LR	MC-LR	Enzo Life Science	ALX-350-012-C100
[D-Asp3]Microcystin-LR	[Asp3] MC-LR	Enzo Life Science	ALX-350-173-C025
[Asp3Dha7]-Microcystin-LR	[Asp3Dha7]-MC-LR	NRC	134842-07-2
Microcystin-RR	MC-RR	Enzo Life Science	ALX-350-043-C050
Microcystin-YR	MC-YR	Enzo Life Science	ALX-350-044-C025
[D-Asp3]Microcystin-RR	[Asp3] MC-RR	Enzo Life Science	ALX-350-168-C025
Microcystin-LA	MC-LA	Enzo Life Science	ALX-350-096-C025
Microcystin-LY	MC-LY	Enzo Life Science	ALX-350-148-C025
Microcystin-LW	MC-LW	Enzo Life Science	ALX-350-080-C025
Microcystin-LF	MC-LF	Enzo Life Science	ALX-350-081-C025
Microcystin-WR	MC-WR	Enzo Life Science	ALX-350-167-C025
Microcystin-HtyR	MC-HtyR	Enzo Life Science	ALX-350-174-C025
Microcystin-HilR	MC-HilR	Enzo Life Science	ALX-350-177-C025
Cyanopeptolin A	CAP	Cyano Biotech GmbH	ALX-350-149-C025
Anabaenopeptin A	AP.A	Enzo Life Science	ALX-350-183-C100