

Supplementary Material

Controlling Eutrophication via Surface Aerators in Irregular-Shaped Urban Ponds

Table S1. Plankton species detected from 1–2 sites in each pond.

	Zhongshan		Maanchi
	June 2018	May 2019	May 2018
Cyanobacteria			
<i>Chroococcus</i> spp.			++
<i>Oscillatoria</i> sp.			++
<i>Merismopedia</i> sp.			++
<i>Microcystis aeruginosa</i>	+++	++++	
<i>Microcystis wesenbergii</i>		++++	
Green algae			
<i>Actinastrum</i> sp.			++
<i>Ankistrodesmus falcatus</i>	+		
<i>Ankistrodesmus</i> sp.			++
<i>Chlorella</i> sp.	+		+
<i>Closterium</i> sp.	++		
<i>Coelastrum cambricum</i>	+		
<i>Dictyosphaerium</i> sp.			++
<i>Eudorina elegns</i>	++		
<i>Pandorina morum</i>	++		
<i>Pandorina</i> spp.			+++
<i>Pediastrum duplex</i>	+		
<i>Pediastrum duplex</i> var. <i>duplex</i>	++	+++	
<i>Pediastrum simplex</i>	+		++
<i>Pediastrum</i> sp.	+		
<i>Scenedesmus</i> sp.	r	+++	++
<i>Schroederia</i> sp.			+
Diatoms			
<i>Aulacoseira ambigua</i> f. <i>japonica</i>		+++	
<i>Aulacoseira granulata</i>	++		
<i>Aulacoseira italica</i>	+	++	
<i>Aulacoseira</i> spp.			+
<i>Cyclotella</i> spp.		+++	++
<i>Fragilaria</i> sp.			++
<i>Gomphonema</i> sp.			+
<i>Melosira varians</i>			+
<i>Navicula</i> spp.			++
<i>Nitzschia</i> spp.		++	+
<i>Synedra acus</i>			+
<i>Synedra ulna</i>			+
Other phytoplankton			
Dinoflagellate			r
<i>Euglena</i> sp.			r
<i>Trachelomonas</i> sp.	+		
Zooplankton			
<i>Arcella</i> sp.			r
<i>Tintinnopsis</i> sp.			r
Rotifer			r
Ostracoda	+		

Cell density (/mL), ++++: >1000, +++: 100–999, ++: 10–99, +: 1–9, r: 0–1

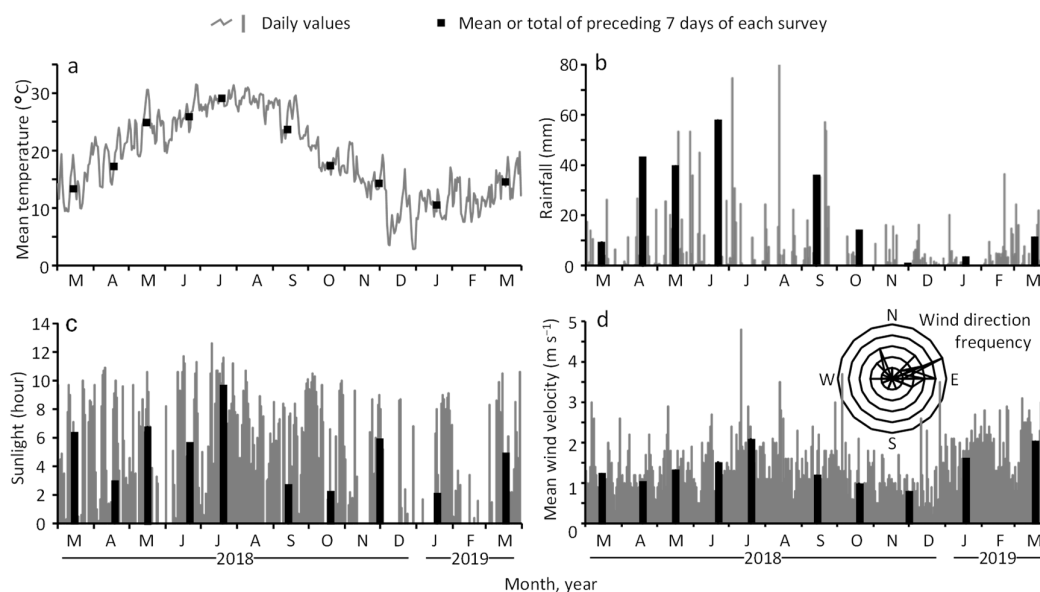


Figure S1. Rainfall (a), sunlight hour (b), mean air temperature (c), mean wind velocity, and wind direction (d) during the study period at the meteorological station in Wenzhou City. Gray bars and lines are daily values and black bars and squares are mean or total of preceding 7 days of survey each month.

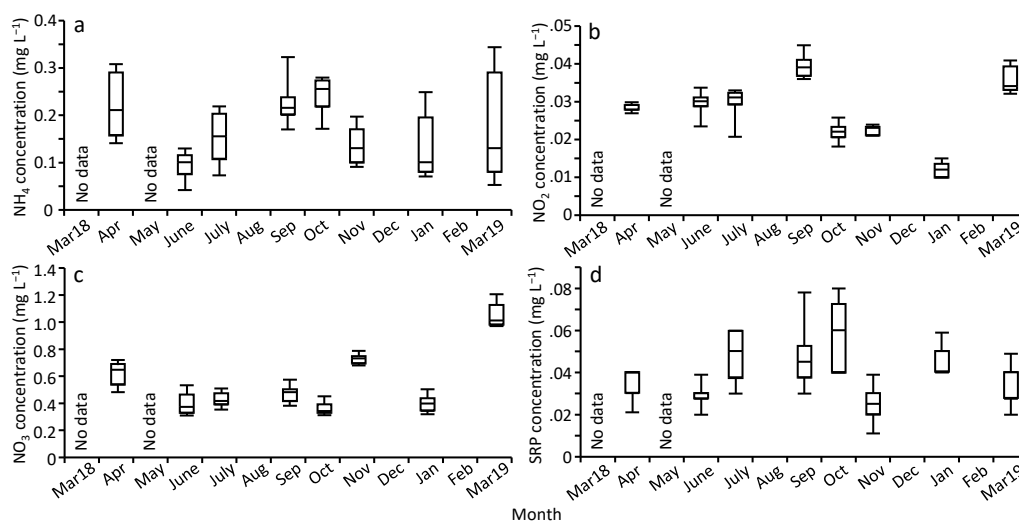


Figure S2. A box plot of nutrient concentrations ((a): NH₄⁺-N, (b): NO₂⁻-N, (c): NO₃⁻-N, (d): SRP) measured at 6 sites and 2 vertical layers in MA. The box plot shows 10, 25, 50, 75, 90 percentiles of concentrations each month.

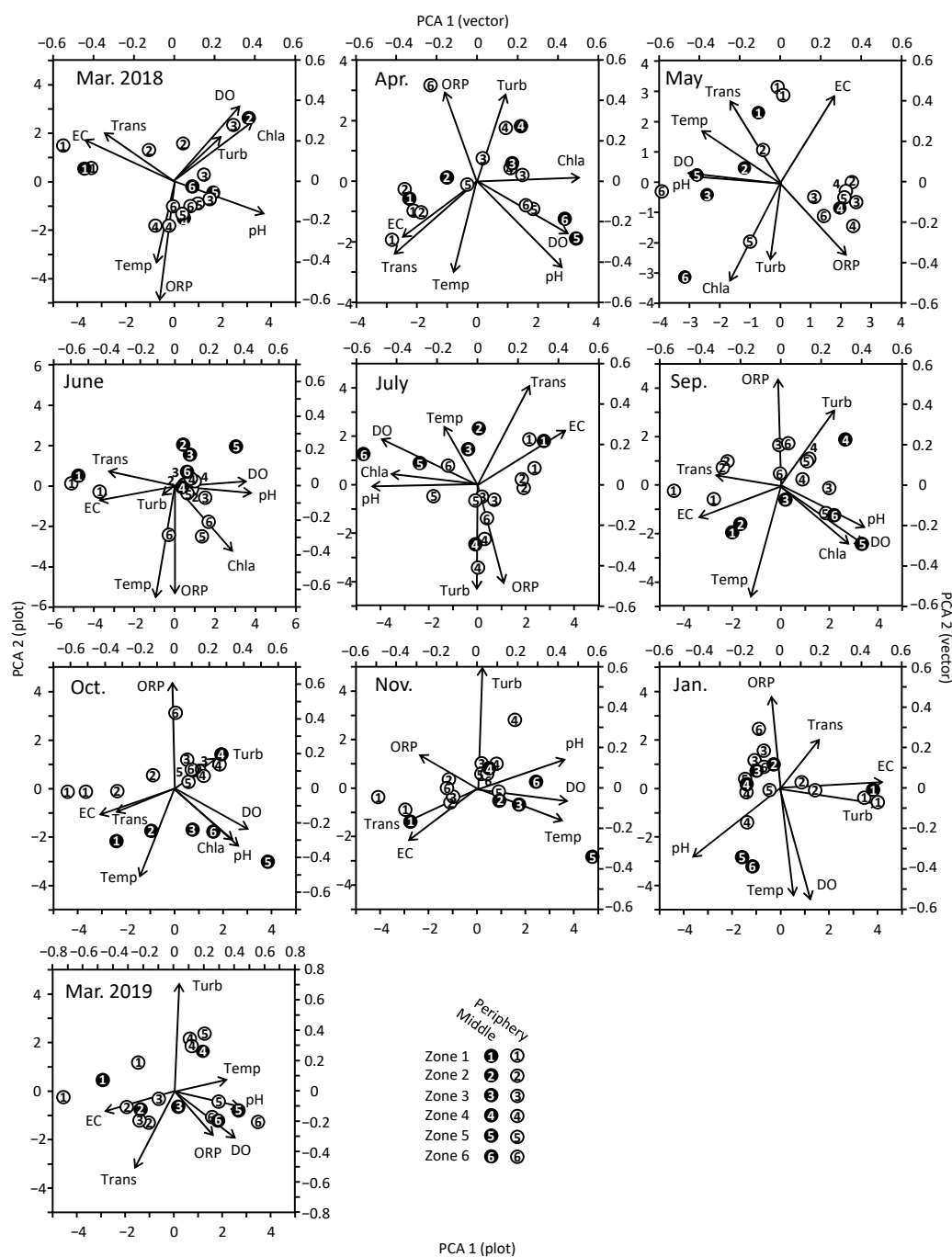


Figure S3. Principal component analysis (PCA) diagram of water quality variables performed for 18 survey sites in MA for each month.