	TSS	TP	DO	TDS	WT	рН	DOC	TN	Chl-a	 _
Richness	0.79 ***	0.73 ***	0.59 ***	-0.76 ***	-0.73 ***	-0.80 ***	-0.74 ***	-0.63 ***	-0.48 **	0.5
Chao1	0.80 ***	0.68 ***	0.60 ***	−0.75 ***	-0.73 ***	-0.79 ***	-0.74 ***	-0.63 ***	-0.49 **	0
Shannon	0.72 ***	0.76 ***	0.56 **	-0.77 ***	-0.78 ***	-0.80 ***	-0.76 ***	−0.54 **	-0.50 **	U
Simpson	0.60	0.70 ***	0.57 **	-0.75 ***	-0.78 ***	-0.71 ***	-0.77 ***	−0.51 **	-0.54 **	-0.5

Figure S3. The Spearman correlations between microbial α -diversity indices and environmental parameters. Red color means highly positive correlation and blue color means highly negative correlation. The numbers in each plot are the correlation coefficient (ρ) and the significance levels (**P < 0.01; ***P < 0.001). The environmental parameters include concentrations of total suspended solids (TSS), total phosphorus (TP), dissolved oxygen (DO), total dissolved solids (TDS), water temperature (WT), water pH value (pH), dissolved organic carbon (DOC), total nitrogen (TN) and chlorophyll-a (Chl-a).