

Factors Driving Microbial Community Dynamics and Potential Health Effects of Bacterial Pathogen on Landscape Lakes with Reclaimed Water Replenishment in Beijing, PR China

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Section S1.

The lower limit of the number of bases for the reading tail mass value was 20. Sequences below the bound were filtered out; meanwhile, a window of 50 bps was set. When the average mass value was lower than 20, the back bases were truncated from the window. The removal of N-containing bases was conducted when the reads below 50 bps were filtered after quality control was complete. The paired reads were merged into a sequence, and the minimum limit of overlap length was 10 bps, based on the overlap relationship between paired-end reads (PE reads).

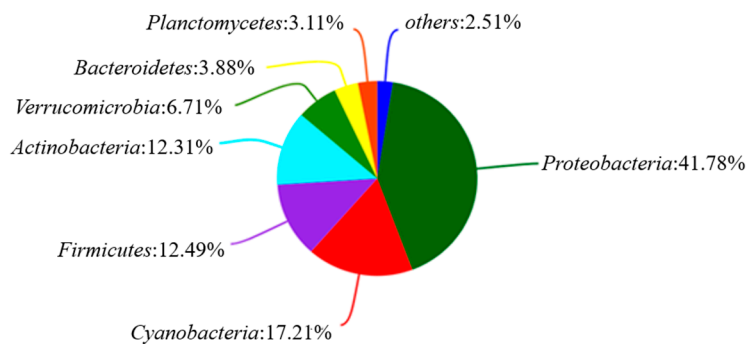


Figure S1. Pie pilot of microbial community on phylum level.

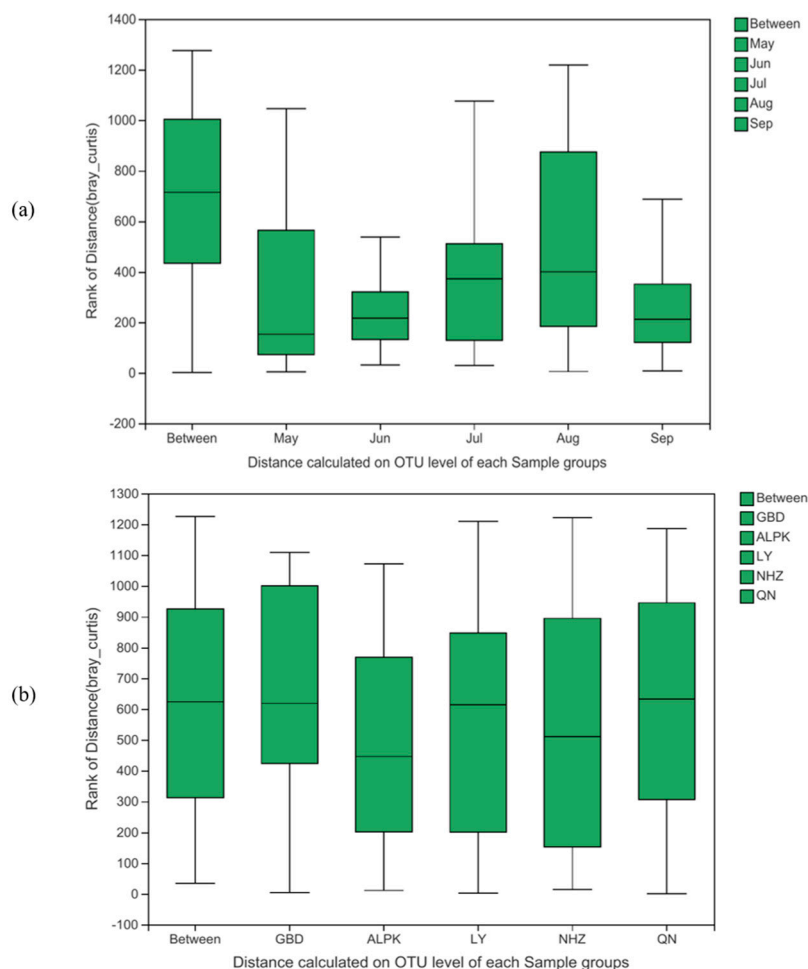


Figure S2. Analysis of similarities of microbial community in different groups on OTU level. The corresponding Adonis analysis results exhibited in Table S2.

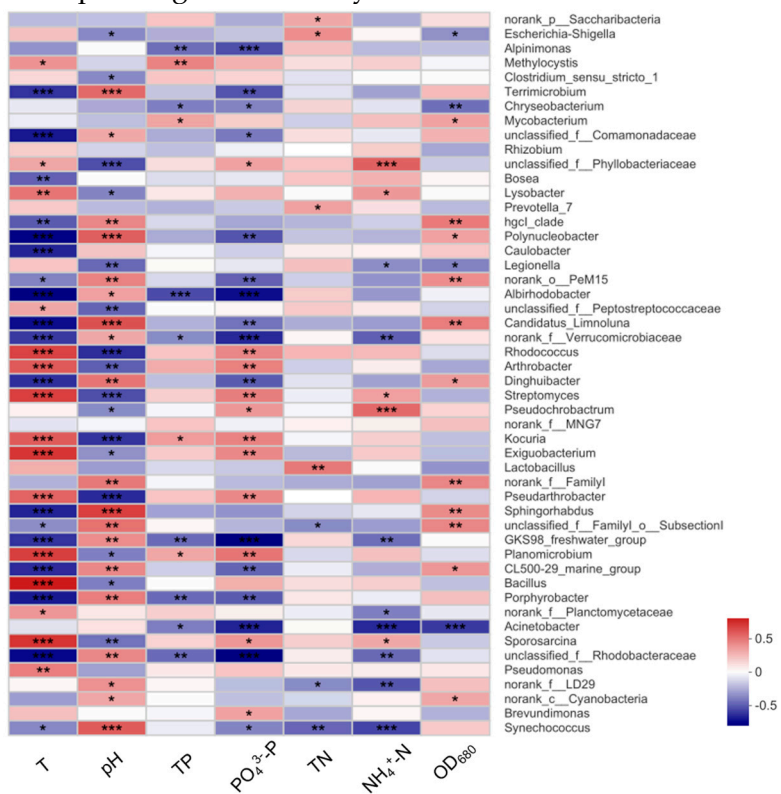


Figure S3. Spearman correlation heatmap of primary environmental factors and bacterial community with top 50 bacterial community abundance. $0.01 < p \leq 0.05$, * $0.001 < p \leq 0.01$, *** $p \leq 0.001$.

Table S1. TN in different lakes and different layers in five months (unit: mg/L).

	May	Jun	Jul	Aug	Sep
ALPK	1.32±0.03	0.52±0.01	0.73±0.03	0.63±0.02	1.76±0.06
GBD	9.75±0.15	10.45±0.14	11.76±1.24	14.52±0.08	11.05±0.08
LY	1.06±0.03	1.11±0.08	1.26±0.04	0.99±1.00	1.0±0.04
NHZ	1.65±0.01	1.48±0.04	1.34±0.44	1.76±0.06	2.03±0.03
QN	5.13±0.10	4.40±0.08	2.81±0.05	2.11±0.06	1.05±0.02

Table S2. Adonis analysis of microbial community in different factor on OTU level

Factors	Sums Of Sqs	Mean Sqs	F.Model	R ²	P(>F)
Lake	3.09	0.77	2.16	0.16	0.001
Month	5.22	1.31	4.19	0.27	0.001