

SUPPLEMENTARY INFORMATION

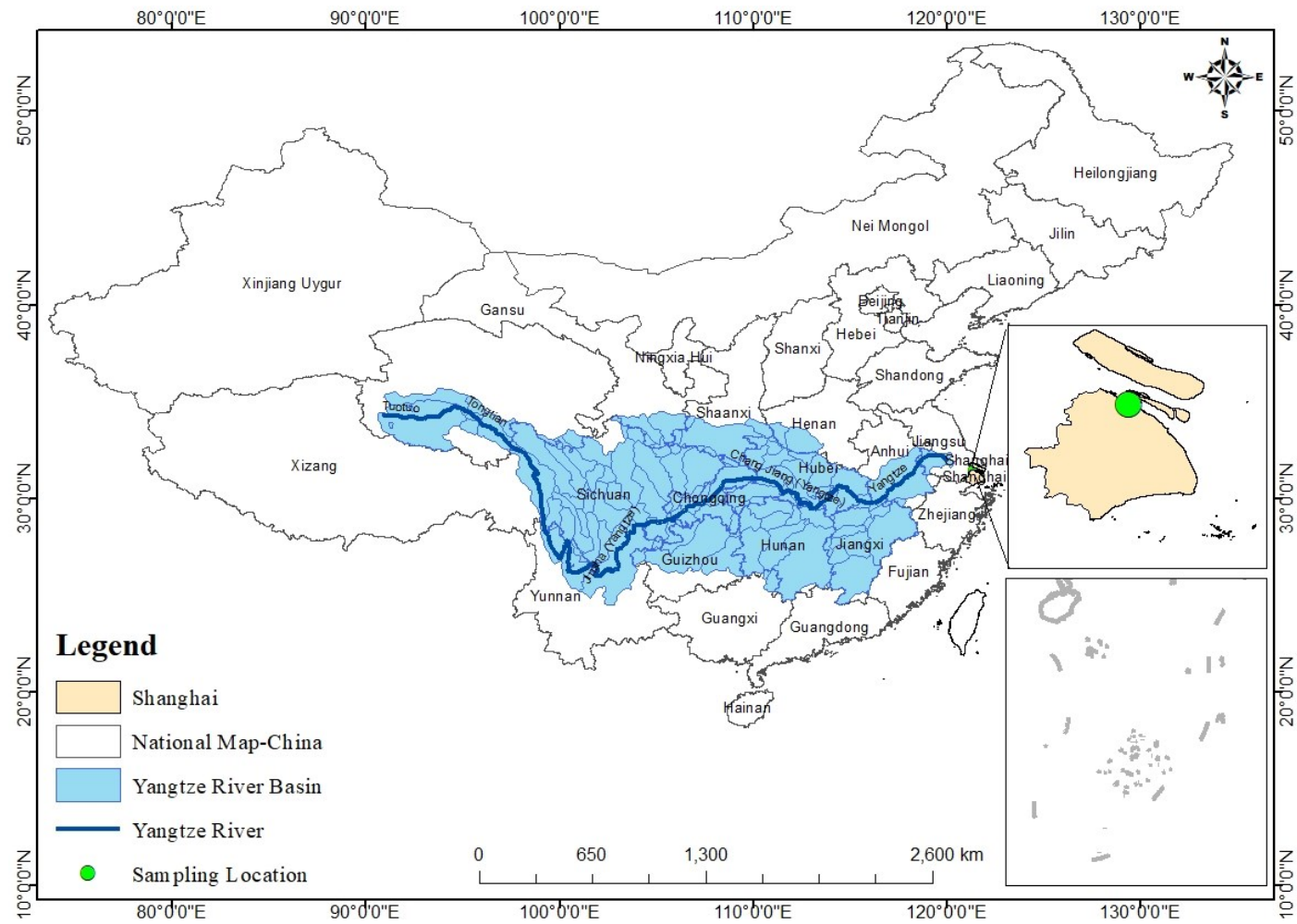


Figure S1: Sampling Location

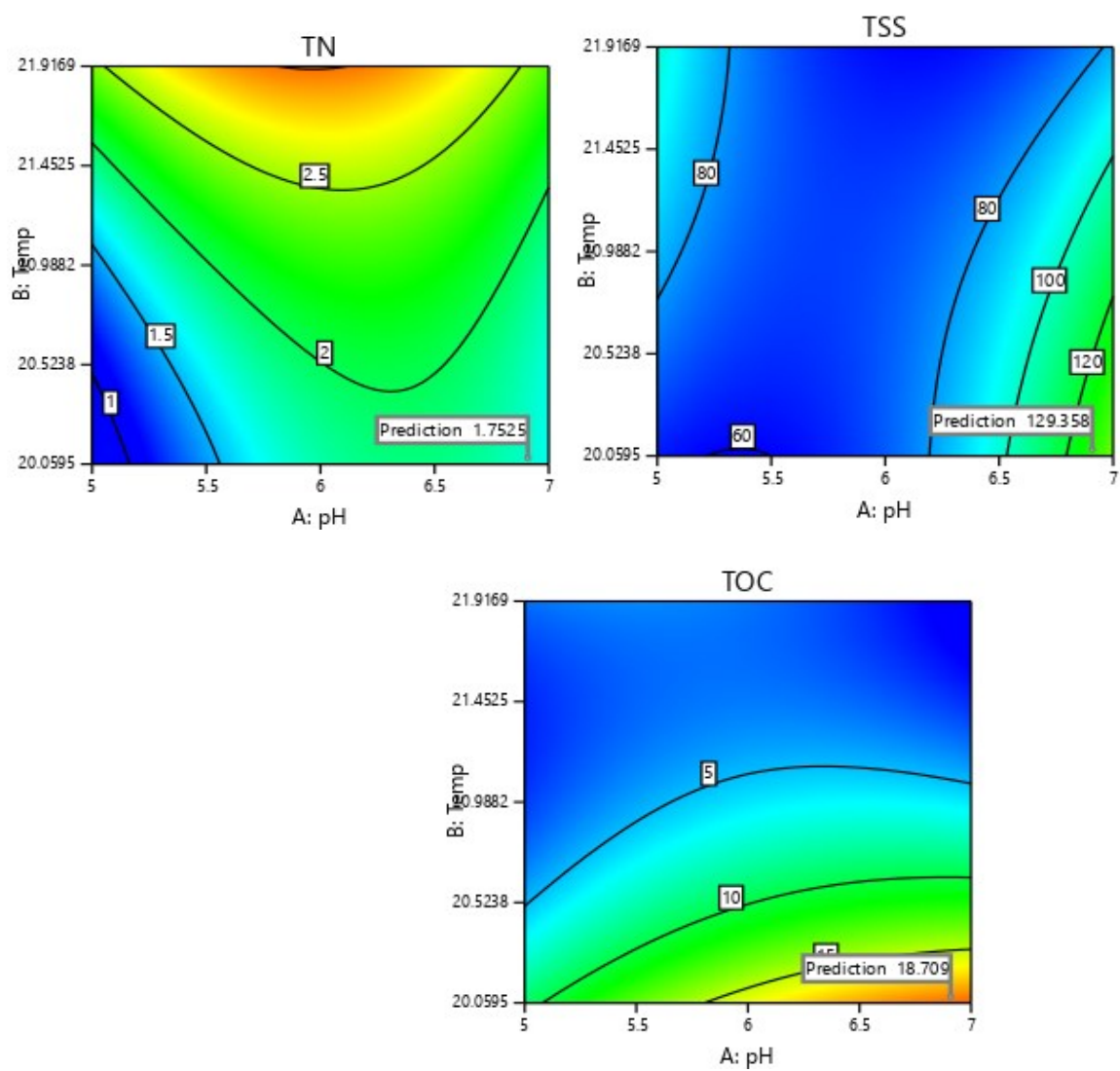


Figure S2: Graphical prediction plots.

Table S1: Box Behnken Design

Run	Factor 1 pH	Factor 2 Temp	Factor 3 Dosage	Response 1 TOC	Response 2 TN	Response 3 TSS
1	6	21	42.5	2.02	1.69	97.83
2	6	21	42.5	1.54	1.43	65.25
3	5	21	80	1.74	1.45	122.16
4	7	21	80	1.24	1.12	190.25
5	6	20	5	21.36	1.41	77.555
6	6	22	80	5.55	2.28	110.63
7	6	21	42.5	8.81	3.23	72.783
8	6	22	5	4.99	3.19	60
9	7	21	5	2.77	2.76	120.83
10	6	20	80	2.64	3.21	131.86
11	5	22	42.5	2.97	2.53	114.5
12	5	20	42.5	3.755	1.48	71.5
13	5	21	5	3.53	1.48	80.66
14	7	20	42.5	18.39	1.44	141.86
15	7	22	42.5	3.33	1.37	86.46

Table S2: ANOVA Results

Source	TOC					TN					TSS				
	Sum of Squares	df	Mean Square	F-value	p-value	Sum of Squares	df	Mean Square	F-value	p-value	Sum of Squares	df	Mean Square	F-value	p-value
					0.314	0.007		0.007	0.011	0.918	2833.		2833.		
A-pH	23.6	1	23.6	1.25	3	7	1	7	7	1	92	1	92	11.64	0.019
B-Temp	107.2		107.2		0.062	0.422		0.422	0.641	0.459	327.4		327.4		0.298
C-Dosage	4	1	4	5.68	9	4	1	4	2	6	9	1	9	1.35	4
					0.140	0.074		0.074	0.113	0.749	5824.		5824.		0.004
	57.8	1	57.8	3.06	6	8	1	8	5	9	53	1	53	23.93	5
					0.161	0.313		0.313		0.520	2420.		2420.		0.025
AB	50.88	1	50.88	2.7	5	6	1	6	0.476	9	48	1	48	9.95	3
	0.017		0.017	0.000		0.641		0.641	0.973	0.369	194.8		194.8	0.800	0.411
AC	3	1	3	9	0.977	3	1	3	5	1	4	1	4	6	9
					0.077					0.157				0.013	0.910
BC	92.83	1	92.83	4.92	4	1.82	1	1.82	2.76	4	3.38	1	3.38	9	7
				0.541	0.494					0.202	3150.		3150.		0.015
A ²	10.22	1	10.22	3	9	1.42	1	1.42	2.15	6	71	1	71	12.95	6
					0.094	0.153		0.153	0.233	0.649				0.274	0.622
B ²	79.94	1	79.94	4.23	7	9	1	9	6	3	66.81	1	66.81	5	7
	0.073		0.073	0.003	0.952	0.145		0.145	0.221	0.657	1573.		1573.		0.051
C ²	5	1	5	9	7	9	1	9	4	8	77	1	77	6.47	7
Residual								0.658			1216.		243.3		
Lack of Fit	94.38	5	18.88			3.29	5	8			84	5	7		
Pure Error					0.476				0.493	0.722	634.8		211.6	0.727	0.623
	61.33	3	20.44	1.24	2	1.4	3	0.467	4	6	7	3	2	3	1
								0.946			581.9		290.9		
Error	33.06	2	16.53			1.89	2	5			8	2	9		