

# REDUCTION OF NON-POINT SOURCE POLLUTION IN THE YONG'AN RIVER BY CONSTRUCTED WETLAND BASED ON 9 YEARS OF MONITORING

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## SUPPLEMENTARY MATERIALS

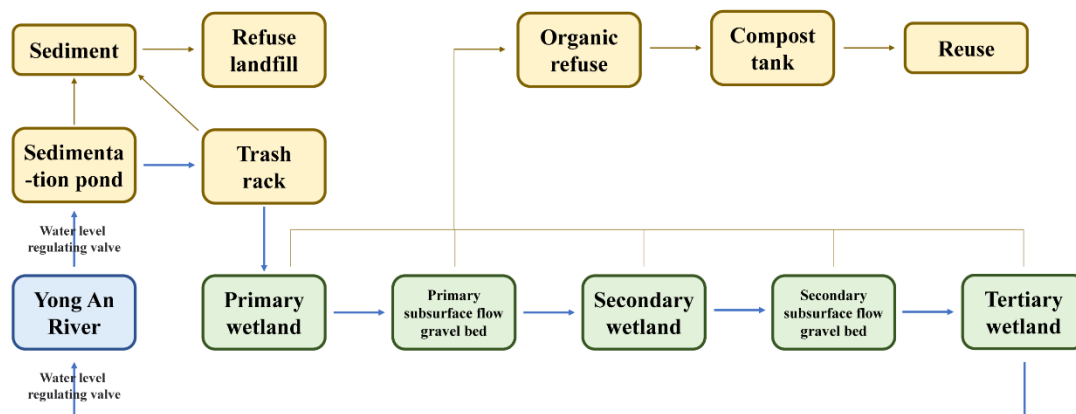
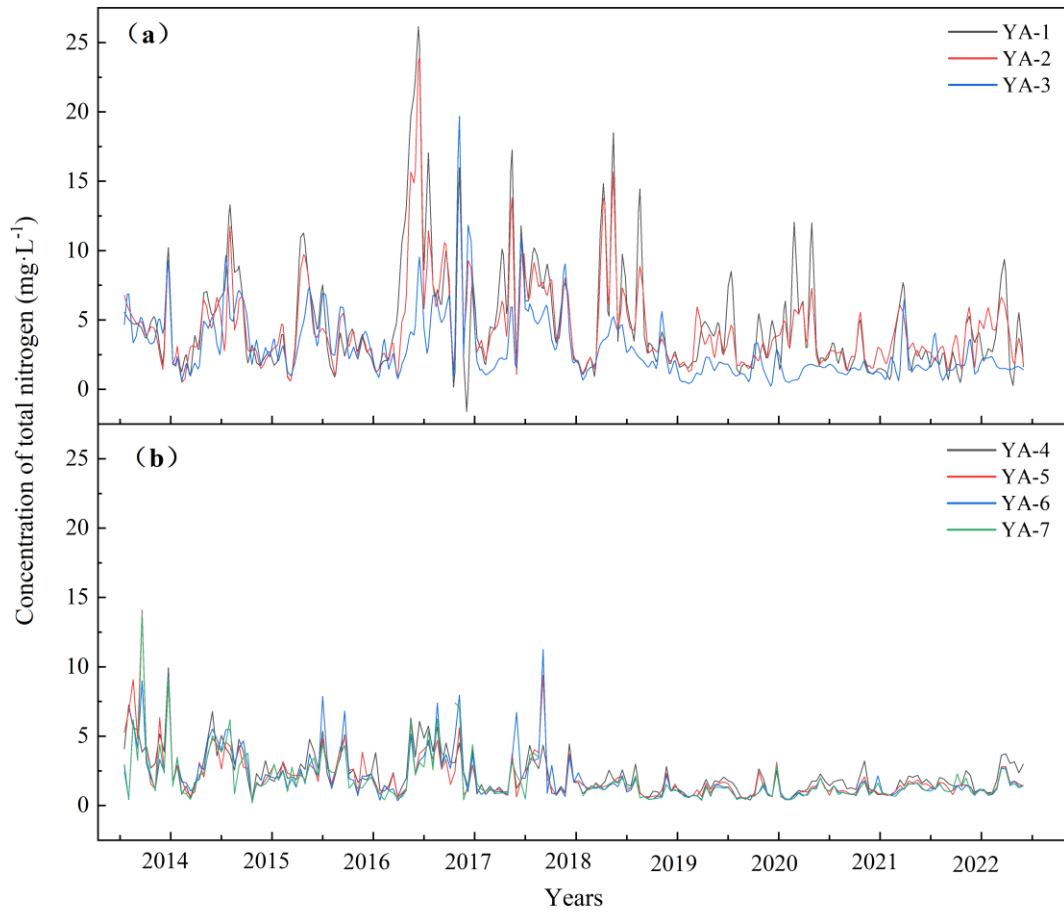
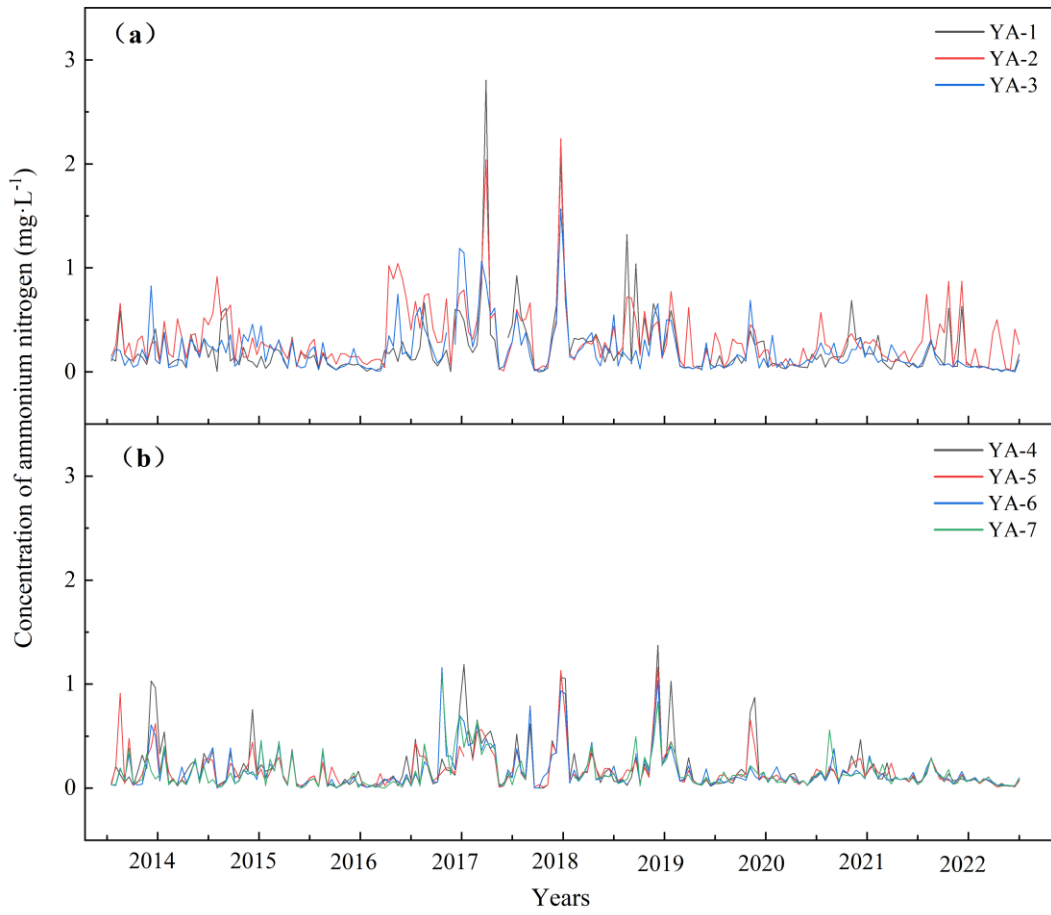


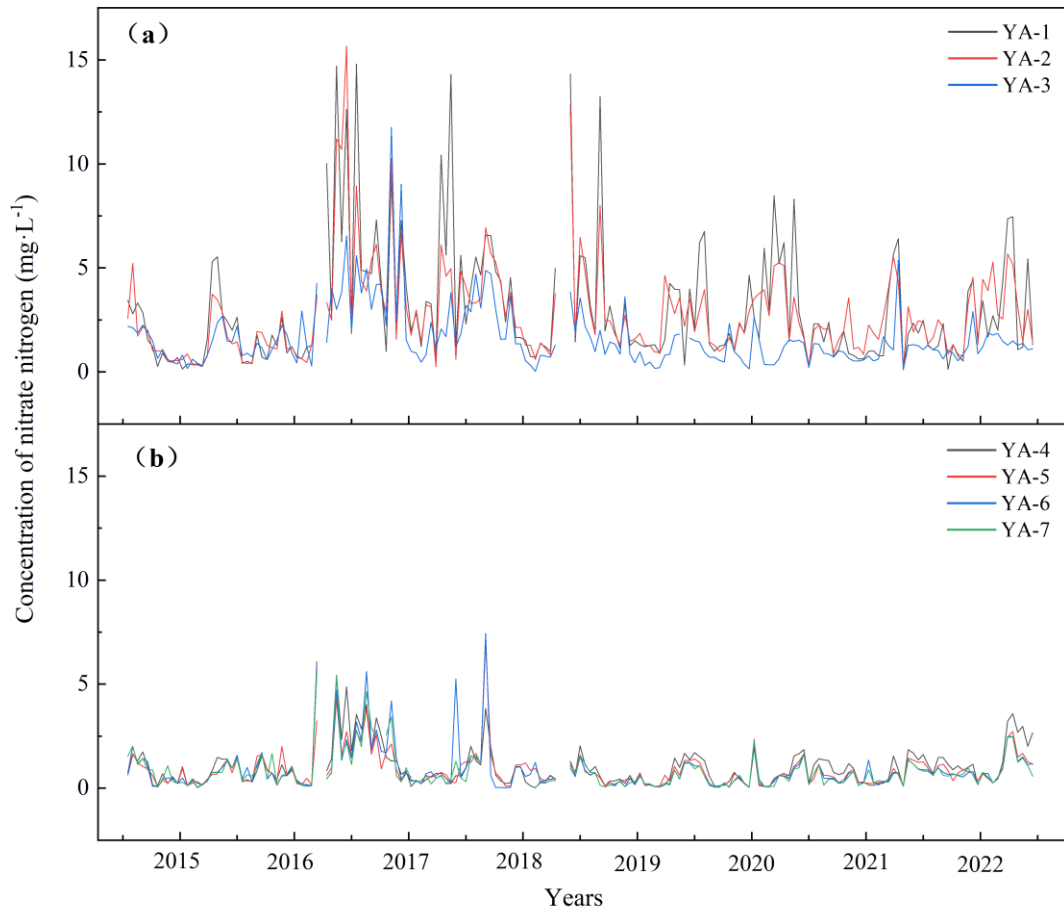
Fig. S1 Wetland process flow chart.



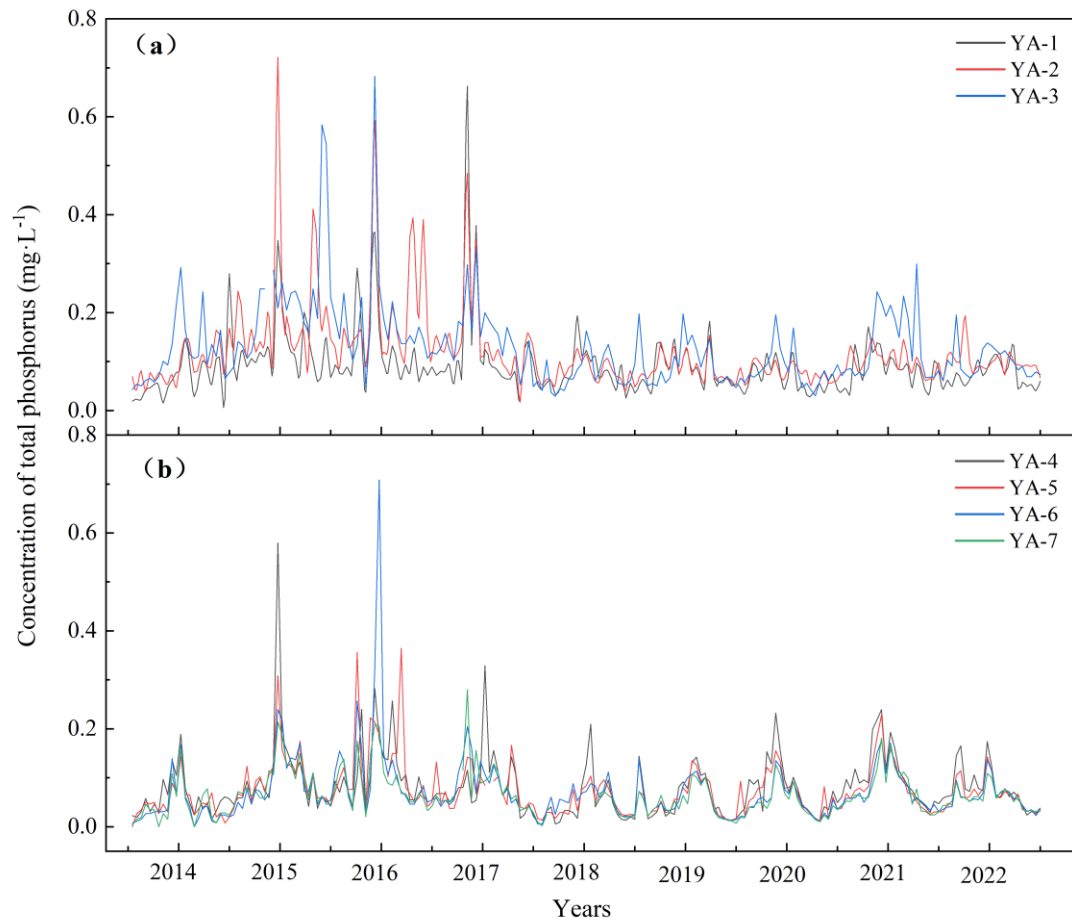
**Fig. S2** Changes of total nitrogen concentration with time in the upstream (a) and downstream (b) of Yong'an River in 9 years.



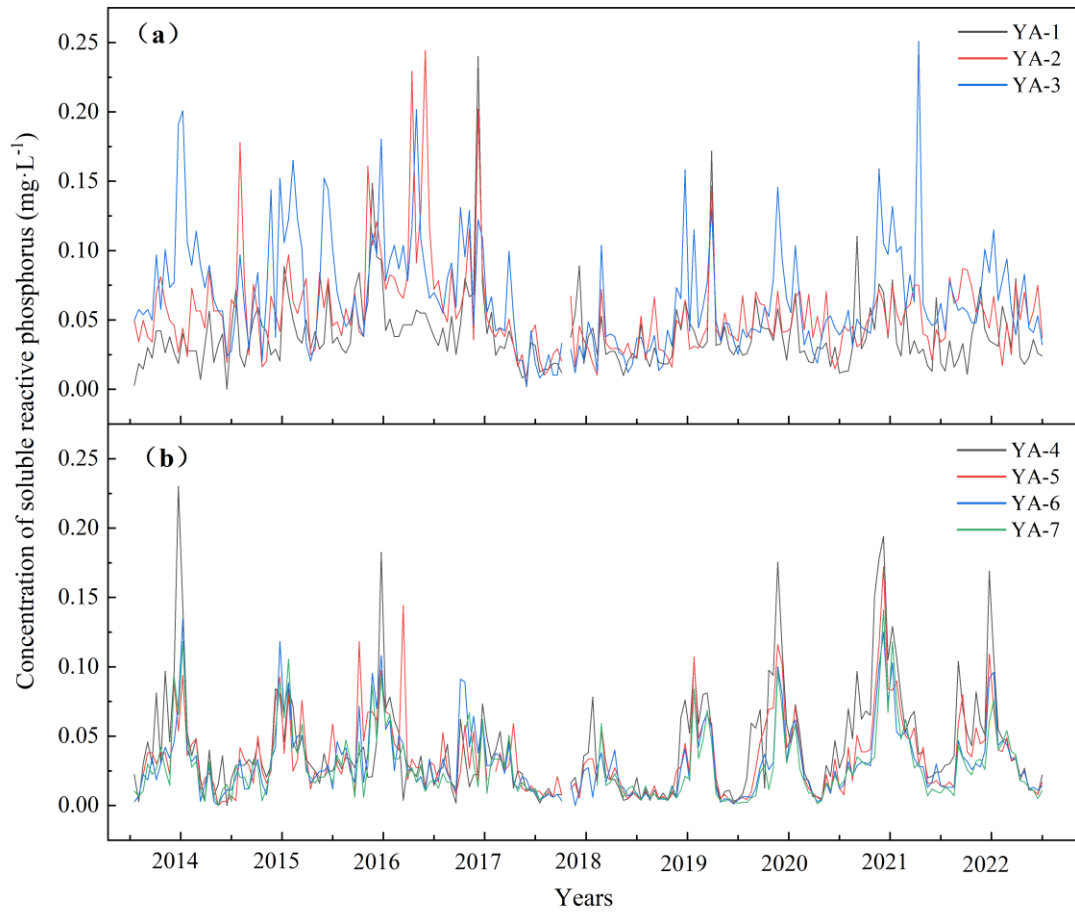
**Fig. S3** Changes of ammonium nitrogen concentration with time in the upstream (a) and downstream (b) of Yong'an River in 9 years.



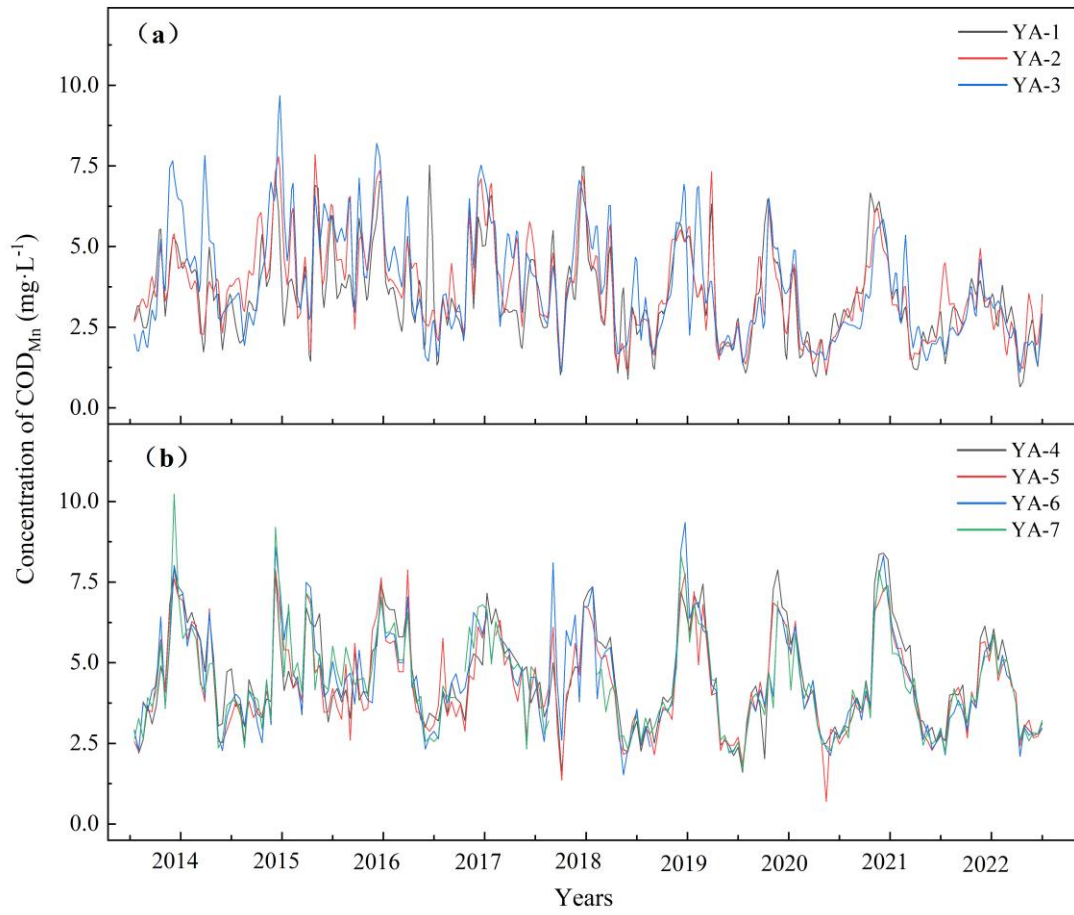
**Fig. S4** Changes of nitrate nitrogen concentration with time in the upstream (a) and downstream (b) of Yong'an River in 8 years.



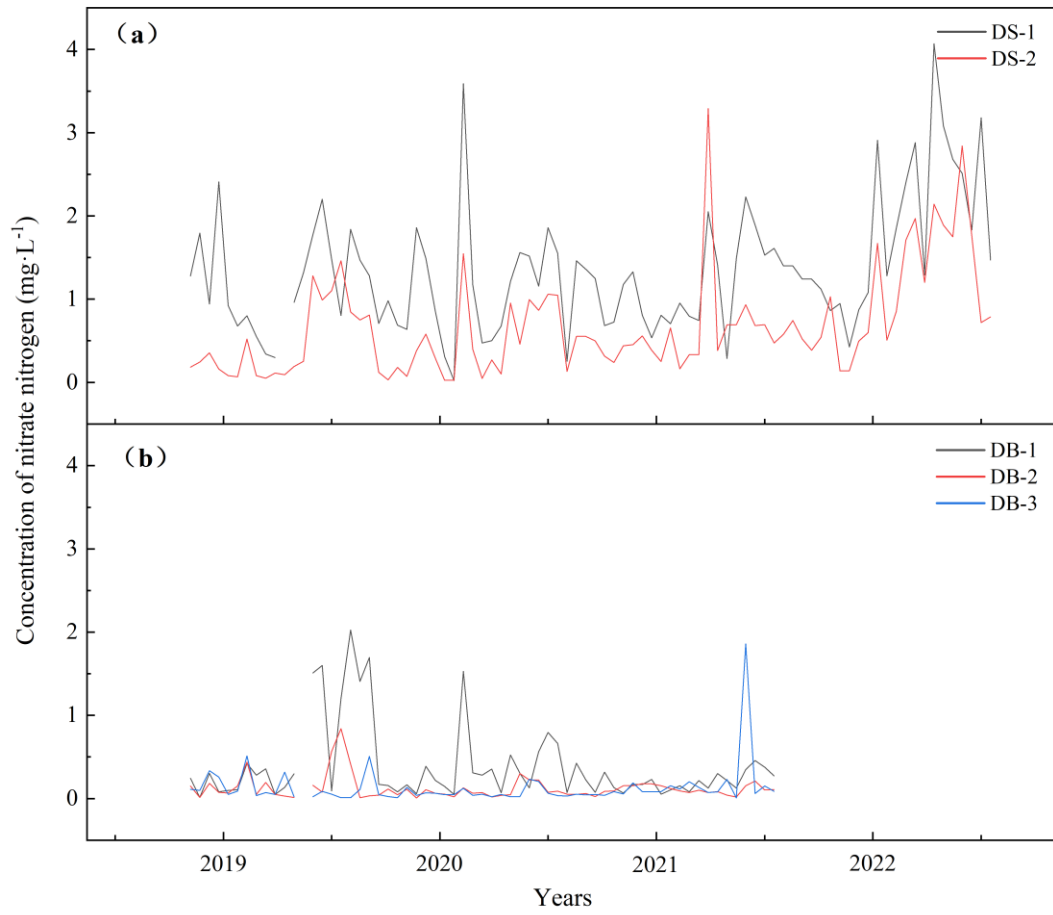
**Fig. S5** Changes of total phosphorus concentration with time in the upstream (a) and downstream (b) of Yong'an River in 9 years.



**Fig. S6** Changes of soluble reactive phosphorus concentration with time in the upstream (a) and downstream (b) of Yong'an River in 9 years.



**Fig. S7** Changes of COD<sub>Mn</sub> concentration with time in the upstream (a) and downstream (b) of Yong'an River in 9 years.



**Fig. S8** Changes of nitrate nitrogen concentration with time in Dashuying wetland (a) and Dengbeiqiao wetland (b) in 4 years.

**Table S1** River and wetland sampling sites and latitude and longitude

Type	No.	Description	Longitude	Latitude
Yong'an River	YA-1	The source of the river	100.033927	26.077955
	YA-2	Xiasanmei	100.035882	26.073731
	YA-3	Large garden	100.048697	26.054319
	YA-4	Wenbi Lake	100.104487	25.998521
	YA-5	Qingsuo	100.114618	25.977198
	YA-6	Jiangwei Bridge	100.129574	25.961443
	YA-7	Lake entrance	100.140679	25.954396
Dashuying wetland	DS-1	Wetland inlet	100.065455	26.052870
	DS-2	Wetland outlet	100.074140	26.042717
Dengbeiqiao wetland	DB-1	Wetland inlet	100.089582	26.024226
	DB-2	Middle of wetland	100.090759	26.018025
	DB-3	Wetland outlet	100.091245	26.014312

**Table S2** Correlations between pollutants in the upstream channel and downstream channel of wetlands

		NO <sub>3</sub> <sup>-</sup> -N	NH <sub>4</sub> <sup>+</sup> -N	TP	SRP	COD <sub>Mn</sub>	Temp.	DO
Upstream channel of wetlands	TN	0.501**	0.174*	0.101	0.055	-0.039	-0.180*	0.052
	NO <sub>3</sub> <sup>-</sup> -N	-	0.121	-0.100	-0.015	-0.256**	-0.133	-0.044
	NH <sub>4</sub> <sup>+</sup> -N	-	-	0.049	0.012	0.253**	0.125	-0.009
	TP	-	-	-	0.565**	0.551**	0.318**	-0.268**
	SRP	-	-	-	-	0.346**	0.313**	-0.342**
	COD <sub>Mn</sub>	-	-	-	-	-	0.525**	-0.202**
	Temp.	-	-	-	-	-	-	-0.322**
Downstream channel of wetlands	TN	0.407**	0.174*	-0.105	-0.101	-0.073	-0.338**	0.090
	NO <sub>3</sub> <sup>-</sup> -N	-	-0.128	-0.214**	-0.237**	-0.245**	-0.374**	0.156*
	NH <sub>4</sub> <sup>+</sup> -N	-	-	0.125	0.128	0.398**	0.281**	-0.277**
	TP	-	-	-	0.730**	0.562**	0.535**	-0.484**
	SRP	-	-	-	-	0.645**	0.569**	-0.526**
	COD <sub>Mn</sub>	-	-	-	-	-	0.680**	-0.584**
	Temp.	-	-	-	-	-	-	-0.593**

Note: \*A significant correlation at level 0.05 (two-tailed), and \*\*a significant correlation at level 0.01 (two-tailed).