Table S1 Raw hydrochemical and nitrogen species data

Sample ID	T (°C)	pH	DO (%)	DO (mg/L)	NH_4^+ (mg/L)	NO_3^- (mg/L)	Cl^- (mg/L)
YD1	27.2	7.7	31.6	2.7	0.05	10.56	223.9
YD2	27.6	7.7	36.5	3.0	0.11	9.5	226.8
YD3	27.5	7.6	33.7	2.8	0.26	9.3	176.1
YD4	28.3	7.7	29.4	2.4	0.22	9.2	151.8
YD5	28.3	7.8	39.7	3.2	0.19	8.3	261.4
YD6	27.3	7.6	22.6	1.8	0.20	3.0	211.0
YD7	27.7	7.6	36.1	2.9	0.08	2.3	271.0
YD8	29.3	7.8	65.6	4.9	0.29	3.4	125.2
YD9	31.4	8.7	91.5	6.8	0.79	-	45.0
YD10	31.3	9.0	111.0	8.0	0.38	-	169.4
YD11	28.1	8.5	99.9	8.1	0.10	7.1	80.0
YD12	30.6	8.8	125.0	9.4	0.20	4.8	75.3
YD13	27.6	8.2	100.5	8.2	0.69	18.0	54.5
YD14	28.2	8.6	110.0	8.7	0.44	13.4	80.2
YD15	21.1	8.3	118.3	11.1	0.94	23.2	24.2
YD16	28.6	8.6	110.0	8.8	0.17	1.9	123.6
YD17	26.8	8.6	85.2	6.8	0.03	1.8	142.1
YD18	25.5	8.2	83.9	7.0	0.06	4.7	141.8
CB1	28.6	8.3	76.9	6.9	0.02	5.4	168.1
CB2	31.3	8.9	170.1	12.8	0.09	13.1	62.4
CB3	30.4	8.2	98.3	7.5	0.35	21.4	91.5
CB4	31.2	9.2	132.0	9.8	0.68	3.8	12.8
CB5	31.5	8.9	109.5	8.1	0.33	4.1	19.8
CB6	29.8	8.4	99.4	7.6	0.31	9.0	11.8
CB7	27.0	8.4	98.3	8.0	0.23	19.1	27.5
CB8	26.5	7.7	72.0	5.9	0.27	9.9	23.8
CB9	25.6	8.3	102.0	8.6	0.76	2.3	18.6
CB10	28.5	8.0	85.6	7.3	0.77	28.5	24.2

Table S2 Nitrate isotope data

Sample ID	$\delta^{15}N\text{-}NO_3^-$ (‰)	$\delta^{18}O\text{-}NO_3^-$ (‰)
YD1	-	-
YD2	11.9	6.7
YD3	-	-
YD4	7.8	7.1
YD5	10.8	5.7
YD6	12.7	-0.1
YD7	19.1	-1.1
YD8	-	-
YD9	-	-
YD10	-	-
YD11	14.1	5.3
YD12	8.9	8.1
YD13	6.1	6.5
YD14	6.8	6.7
YD15	6.9	4.4
YD16	8.7	5.8
YD17	-	-
YD18	-	-
CB1	11.4	10.6
CB2	14.8	8.3
CB3	16.8	5.9
CB4	-	-
CB5	7.8	7.2
CB6	6.3	5.9
CB7	6.8	7.5
CB8	10.2	8.3
CB9	9.4	9.7
CB10	-	-