Supplementary Materials

Table S1. Annual average levels of TP and P species in water from 11 rivers flowing into Lake Chaohu. All results are expressed in $mg \cdot L^{-1}$.

Group	River	TP	TDP	PP	SRP	DNP
Urban	NF	0.845	0.591	0.254	0.490	0.101
	SWL	1.418	1.142	0.276	1.027	0.115
	TX	0.265	0.089	0.176	0.043	0.045
	PH	0.517	0.294	0.223	0.252	0.041
	SQ	0.373	0.265	0.108	0.194	0.070
Rural	HB	0.099	0.048	0.051	0.017	0.030
	BST	0.138	0.045	0.093	0.013	0.032
	ZH	0.142	0.050	0.092	0.010	0.040
	ZG	0.117	0.037	0.080	0.013	0.024
	QY	0.098	0.031	0.067	0.008	0.022
	TY	0.128	0.040	0.088	0.012	0.028

Notes: TP = total phosphorus; TDP = total dissolved phosphorus; PP = particulate phosphorus; SRP = soluble reactive phosphorus; DNP = dissolved nonreactive phosphorus.

Table S2. Percentages of P species relative to TP in water from 11 rivers flowing into Lake Chaohu. All results are expressed in %.

Group	River	TDP/TP	PP/TP	SRP/TP	DNP/TP
Urban	NF	67.9	32.1	56.7	11.2
	SWL	80.7	19.3	70.3	10.4
	TX	35.8	64.2	16.7	19.0
	PH	60.3	39.7	49.6	10.7
	SQ	67.7	32.3	49.4	18.2
Rural	HB	43.6	56.4	16.9	26.7
	BST	30.4	69.6	9.5	20.9
	ZH	36.1	63.9	9.0	27.1
	ZG	28.9	71.1	10.2	18.7
	QY	30.7	69.3	9.0	21.8
	TY	28.3	71.7	9.3	19.0

Table S3. Annual average levels of TN and N species in water from 11 rivers flowing into Lake Chaohu. All results are expressed in $mg \cdot L^{-1}$.

Group	River	TN	TDN	PN	DIN	DON	Amm	Nitrate	Nitrite
Urban	NF	13.473	13.057	0.416	12.516	0.540	8.541	3.577	0.398
	SWL	19.221	18.512	0.710	17.158	1.354	14.290	2.499	0.420
	TX	4.649	3.961	0.688	3.514	0.448	1.490	1.866	0.157
	PH	9.894	9.127	0.766	8.579	0.548	6.231	2.298	0.119
	SQ	7.572	7.356	0.216	7.115	0.240	6.234	0.850	0.064

Table S3. *Cont.*

Group	River	TN	TDN	PN	DIN	DON	Amm	Nitrate	Nitrite
Rural	HB	2.097	1.944	0.153	1.677	0.267	0.306	1.317	0.054
	BST	2.508	2.237	0.271	1.844	0.393	0.515	1.260	0.069
	ZH	2.733	2.294	0.439	1.881	0.412	0.541	1.254	0.086
	ZG	2.038	1.720	0.318	1.440	0.280	0.420	0.959	0.061
	QY	1.429	1.093	0.335	0.856	0.237	0.329	0.471	0.055
	TY	1.742	1.352	0.390	1.070	0.282	0.389	0.635	0.046

Notes: TN = total nitrogen; TDN = total dissolved nitrogen; PN = particulate nitrogen; DIN = dissolved inorganic nitrogen; DON = dissolved organic nitrogen; Amm = ammonium.

Table S4. Percentages of N species relative to TN in water from 11 rivers flowing into Lake Chaohu. All results are expressed in %.

Group	River	TDN/TN	PN/TN	DIN/TN	DON/TN	Amm/TN	Nitrate/TN	Nitrite/TN
Urban	NF	96.8	3.2	91.8	5.0	61.2	27.5	3.1
	SWL	96.9	3.1	90.4	6.5	72.0	16.5	2.2
	TX	85.9	14.1	76.3	9.5	30.5	42.7	3.2
	PH	92.3	7.7	85.8	6.5	57.1	27.6	1.6
	SQ	97.4	2.6	94.1	3.3	73.9	19.4	1.2
Rural	HB	92.7	7.3	79.3	13.4	12.7	64.3	2.3
	BST	81.8	18.2	65.1	16.7	19.0	43.6	2.4
	ZH	76.3	23.7	59.0	17.3	19.2	37.0	2.8
	ZG	75.2	24.8	55.8	19.4	15.6	38.1	2.2
	QY	72.0	28.0	48.1	23.9	18.6	27.2	2.4
	TY	73.0	27.0	54.1	18.9	19.3	32.7	2.1

Table S5. TP and P components in surface sediments (0–2 cm) from 11 rivers flowing into Lake Chaohu. All results are expressed in $mg \cdot kg^{-1}$.

Group	River	NaCl-P/TP	BD-P	NaOH-P	Org-P	HCl-P	Res-P	TP
Urban	NF	28.9	320	2461	253	116	51.4	3230
	SWL	0.406	137	410	424	106	56.9	1135
	TX	5.83	84.7	169	61.1	73.9	45.1	439
	PH	0.583	82.0	808	80.4	55.3	38.9	1065
	SQ	10.6	121	1277	466	252	143	2269
Rural	HB	0.080	33.5	141.2	68.7	129.0	55.5	428
	BST	2.04	46.5	374	220	127	84.5	854
	ZH	1.28	27.8	148	54.0	76.2	58.1	365
	ZG	1.19	50.8	261	158	244	32.2	746
	QY	1.02	67.5	156	106	64.4	67.8	463
	TY	0.269	65.9	133	112	98.2	49.5	458

Table S6. Percentage of P species relative to TP in surface sediments (0–2 cm) from 11 rivers flowing into Lake Chaohu. All results are expressed in %.

Group	River	NaCl-P/TP	BD-P/TP	NaOH-P/TP	Org-P/TP	HCl-P/TP	Res-P/TP
Urban	NF	0.89	9.91	76.2	7.83	3.59	1.59
	SWL	0.04	12.1	36.1	37.4	9.29	5.02
	TX	1.33	19.3	38.4	13.9	16.8	10.3
	PH	0.05	7.70	75.9	7.55	5.19	3.65
	SQ	0.47	5.35	56.3	20.5	11.1	6.29
Rural	HB	0.02	7.84	33.0	16.1	30.2	13.0
	BST	0.24	5.45	43.8	25.8	14.9	9.89
	ZH	0.35	7.60	40.5	14.8	20.9	15.9
	ZG	0.16	6.81	34.9	21.2	32.6	4.32
	QY	0.22	14.6	33.7	22.9	13.9	14.6
	TY	0.06	14.4	29.0	24.4	21.4	10.8