Table S1. Extended Data Table 1 Statistical description of the publications information and sediment guideline values

River Basin	serial number	study area	Index	heavy metal content (mg/kg)					
				Cu	Zn	Pb	Ni	Cr	Cd
Pearl River Basin	1	Xiaohai Lake	SNWM	4	36.1	24.7	/	/	0.09
			S.D.	2.7	16.6	15.4	/	/	0.05
			CV(%)	0.675	0.46	0.623	/	/	0.556
			background	35	150	60		80	0.5
	2	Xingyun Lake	SNWM	78.011	327.366	78.614	33.7	84.649	1.237
			S.D.	5.96	11.18	8	3.24	12.23	0.08
			CV(%)	0.076	0.034	0.102	0.096	0.144	0.065
			background	81.28	140.68	75.53	48.23	92.86	0.55
	3	Fuxian Lake	SNWM	73.911	161.2	80.022	46.178	92.067	7.9
			S.D.	19.9	18.9	31	8.5	23.9	3.1
			CV(%)	0.269	0.117	0.387	0.184	0.26	0.392
			background	103	118	44	50	93	0.3
	4	Dawangtan Lake	SNWM	34.4	108.6	41.74	28.28	74.78	0.679
			S.D.	5.64	4.224	8.012	1.015	1.333	0.529
			CV(%)	0.164	0.039	0.192	0.036	0.018	0.779
			background	27.8	75.6	24	30	88	0.152
	5	Baiyun Lake	SNWM	275.91	594.38	89.46	117.34	143.13	4.91
			S.D.	131.38	242.36	15.96	42.6	50.31	1.91
			CV(%)	0.476	0.408	0.178	0.363	0.351	0.389

			background	17	47.3	36	14.4	50.5	0.06
			SNWM	86.1	357.77	84.45	24.88	48.32	1.13
			S.D.	29.92	155.81	24.93	5.11	10.81	0.39
	6	Liuhua Lake	CV(%)	0.348	0.436	0.295	0.205	0.224	0.345
			background	17	47.3	36	14.4	50.5	0.06
			SNWM	185.51	552.73	126.28	116.36	118.66	2.7
			S.D.	32.39	113.69	32.27	111.98	18.88	0.23
	7	Dongshan Lake	CV(%)	0.175	0.206	0.256	0.962	0.159	0.085
			background	17	47.3	36	14.4	50.5	0.06
			SNWM	126.2	212.87	55.6	33.8	73.85	1.12
			S.D.	99.05	82.48	8.25	10.02	41.79	0.28
	8	Huadu Lake	CV(%)	0.785	0.387	0.148	0.296	0.566	0.25
			background	17	47.3	36	14.4	50.5	0.06
			SNWM	24.42	143.12	26.2	/	245.3	0.67
			S.D.	7.57	269.81	29.85	/	214.95	0.32
	9	Jinshan Lake	CV(%)	0.31	1.885	1.139	/	0.876	0.478
			background	54.08	252	26.03		83.17	0.31
			SNWM	59.15	/	11.55	/	35.69	/
			S.D.	45.88	/	6.83	/	44.81	/
	10	Lugu Lake	CV(%)	0.776	/	0.591	/	1.256	/
Yangtze River Basin			background	46.3		40.6		65.2	
			SNWM	24.9	143	32	/	88.7	0.66
			S.D.	3.51	185	8.02	/	14.9	0.47
	11	Qionghai Lake[	CV(%)	0.141	1.294	0.251	/	0.168	0.712

		background	32.2	91.7	36.1		72	0.084
		SNWM	35.096	222.775	54.115	47.86	96.637	5.382
		S.D.	18.519	104.043	22.535	13.513	39.33	14.406
12	Caohai Lake	CV(%)	0.528	0.467	0.416	0.282	0.407	2.677
		background	30	87	30	36	84	0.25
		SNWM	49.84	180.346	164.809	47.609	76.098	1.936
		S.D.	33.689	108.375	196.884	23.891	55.37	1.421
13	Yelang Lake	CV(%)	0.676	0.601	1.195	0.502	0.728	0.734
		background	29.43	89.94	29.39	32.84	79.42	0.31
		SNWM	57.787	311.29	27.73	/	71.788	0.784
		S.D.	27.315	73.967	14.744	/	31.5	0.712
14	Baihua Lake	CV(%)	0.473	0.238	0.532	/	0.439	0.908
		background	40	84	21		65	0.27
		SNWM	72.313	145.22	34.044	190	86.106	1.564
		S.D.	36.378	37.035	16.41	37.8	22.691	1.876
15	Hongfeng Lake	CV(%)	0.503	0.255	0.482	0.199	0.264	1.2
		background	32	99.5	35.2	39.1	95.9	0.66
		SNWM	78.63	122.94	36	/	84.19	0.44
		S.D.	8.991	11.797	4.351	/	14.693	0.125
16	Huaxi Lake	CV(%)	0.114	0.096	0.121	/	0.175	0.284
		backgrou	30	80	25	/	60	0.5

		nd						
		SNWM	66.98	131.55	46.04	/	28.41	0.75
		S.D.	10.764	18.759	9.871	/	2.96	0.115
17	Yutan Lake	CV(%)	0.161	0.143	0.214	/	0.104	0.153
		background	21.96	79.47	22.2		48.55	0.4
		SNWM	63.5	63.1	41.6	/	18.52	0.484
		S.D.	34.56	23.77	31.24	/	12.11	0.24
18	Changshou Lake	CV(%)	0.544	0.377	0.751	/	0.654	0.496
		background	79.47	21.9	22.2		48.55	0.14
		SNWM	64.8	283.6	15.39	37.17	168.3	1.27
		S.D.	/	/	/	/	/	/
19	Danjiangkou Lake	CV(%)	/	/	/	/	/	/
		background	23.4	71.8	29.2	30.5	66.9	0.11
		SNWM	40.291	149.489	46.93	36.136	73.397	2.568
		S.D.	13.933	74.237	33.821	7.905	21.928	3.935
20	Dongting Lake	CV(%)	0.346	0.497	0.721	0.219	0.299	1.532
		background	20.2	83.3	23.3	21.2	44	0.33
		SNWM	45.775	90.3	57.342	/	53.267	0.46
		S.D.	15.329	27.51	15.329	/	18.791	0.135
21	Danan Lake	CV(%)	0.335	0.305	0.267	/	0.353	0.293
		background	32.9	92.6	27.1		85.7	0.137
		SNWM	123.4	392.2	97.2	66.4	127.1	/
22	Moshui Lake	S.D.	59.9	210.2	49.4	12.9	52.8	/
		CV(%)	0.485	0.536	0.508	0.19	0.415	/

						4		
		background	40	120	90	37.3	86	/
		SNWM	51.28	145.01	41.6	40.49	85.28	0.66
		S.D.	12.61	47.01	8.46	7.3	10.6	0.17
23	Tangxun Lake	CV(%)	0.246	0.324	0.203	0.18	0.124	0.258
		background	32	79	25	40	90	0. 12
		SNWM	59.701	170.642	36.992	39.873	84.355	0.803
		S.D.	12.846	38.926	12.352	11.085	24.424	0.177
24	Liangzi Lake	CV(%)	0.215	0.228	0.334	0.278	0.29	0.22
		background	30	83	26	37	86	0.2
		SNWM	201.16	300.18	82.48	46.26	59.17	/
		S.D.	100.58	42.025	10.722	3.701	8.876	/
25	Qingshan Lake	CV(%)	0.5	0.14	0.13	0.08	0.15	/
		background	30.7	83.6	26.7	37.3	86	
		SNWM	496.139	584.62	177.414	98.268	/	35.963
		S.D.	127.87	54.121	40.707	48.153	/	14.394
26	Daye Lake	CV(%)	0.258	0.093	0.229	0.49	/	0.4
		background	30.7	83.6	26.7	37.3	/	0.17
		SNWM	62.6	156.2	37.1	/	119.6	0.7
		S.D.	21.9	11.9	5.2	/	24.1	0.1
27	Wanghu Lake	CV(%)	0.35	0.076	0.14	/	0.202	0.143
		background	30.7	83.6	26.7		86	0.17
28	Xianghu Lake	SNWM	53.16	1604.829	205.32	32.67	49	/

		S.D.	54.941	3990.536	196.697	26.172	23.883	/
		CV(%)	1.034	2.311	0.958	0.801	0.487	/
		background	21.05	66.39	28.88	22.33	65.85	
		SNWM	40.296	122.706	44.553	27.542	60.654	0.886
29	Poyang Lake	S.D.	26.424	128.713	15.745	20.73	29.609	0.766
		CV(%)	0.656	1.049	0.353	0.753	0.488	0.865
		background	22.2	81.1	30.4	21.5	45.8	0.11
		SNWM	37.508	147.984	50.113	/	/	0.91
		S.D.	7.583	20.675	12.163	/	/	0.981
30	Shengjin Lake	CV(%)	0.202	0.14	0.243	/	/	1.078
		background	16.4	77.1	23.5			0.44
		SNWM	51.044	252.541	63.419	35.958	73.589	15.131
		S.D.	40.412	273.533	57.714	10.107	21.76	27.88
31	Chaohu Lake	CV(%)	0.792	1.083	0.91	0.281	0.296	1.843
		background	32	83	29	35	80	0.162
		SNWM	38.42	124.33	35.92	41.25	94.92	0.17
		S.D.	5.76	32.35	6.04	4.25	10.56	0.05
32	Shijiu Lake	CV(%)	0.15	0.26	0.168	0.103	0.111	0.294
		background	23.4	64.8	22	32.8	75.6	0.09
		SNWM	39.788	162.783	44.935	32.534	43.997	1.988
33	Mochou Lake	S.D.	9.592	26.712	5.433	8.61	22.36	1.24

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		CV(%)	0.241	0.164	0.121	0.265	0.508	0.628
		background	32.3	76.8	24.8	35	59	0.2
		SNWM	26.68	87.9	28.98	38.55	82.78	0.21
		S.D.	3.33	14.2	3.23	3.68	3.54	0.11
34	Gucheng Lake	CV(%)	0.125	0.162	0.111	0.095	0.043	0.524
		background	23.4	64.8	22	32.8	75.6	0.09
		SNWM	39.5	136.5	32.8	44.9	83.6	0.37
		S.D.	10.27	31.395	6.232	5.837	10.868	0.107
35	Changdang Lake	CV(%)	0.26	0.23	0.19	0.13	0.13	0.29
		background	23.4	64.8	22	32.8	75.6	0.09
		SNWM	29.518	87.179	35.87	35.801	73.985	0.666
		S.D.	16.274	52.454	10.883	16.431	52.531	0.454
36	Taihu Lake	CV(%)	0.551	0.602	0.303	0.459	0.71	0.682
		background	22.3	62.6	26.2	19.5	77.8	0.13
		SNWM	58.917	162.198	32.301	64.723	93.146	0.392
		S.D.	38.149	88.279	5.865	15.823	21.715	0.189
37	Yangcheng Lake	CV(%)	0.647	0.544	0.182	0.244	0.233	0.483
		background	23.03	64.98	22.11	32.83	75.42	0.09
		SNWM	22	/	2.7	/	1.4	1.2
		S.D.	9.12	/	1.03	/	0.02	0.15
38	Dishui Lake	CV(%)	0.415	/	0.381	/	0.014	0.125
		background	17. 43		20.14		28.27	0.09

			SNWM	30.248	99.049	26.874	38.245	76.803	0.412
			S.D.	10.275	38.661	6.151	18.702	52.194	0.213
	39	Suyahu Lake	CV(%)	0.34	0.39	0.229	0.489	0.68	0.516
			background	21.4	65.1	14.4	24.9	53.6	0.09
			SNWM	118	174	82	31.1	65.8	0.43
			S.D.	119.18	57.42	38.54	4.043	9.87	0.12
	40	Baogong Lake	CV(%)	1.01	0.33	0.47	0.13	0.15	0.28
			background	13.7	34.5	16.7	15.8	17.5	0.24
			SNWM	24.74	97.605	39.266	/	91.243	/
			S.D.	6.554	29.735	8.614	/	40.975	/
	41	Wabu Lake	CV(%)	0.265	0.305	0.219	/	0.449	/
Huai River Basin			background	26.467	56.567	24	33.267	76.57	0.079
			SNWM	35.83	160.43	27.09	35.82	/	0.22
			S.D.	5.016	34.14	4.632	4.248	/	0.037
	42	Jiaogang Lake	CV(%)	0.14	0.213	0.171	0.119	/	0.167
			background	24.16	80.81	30.47	25.74		0.061
			SNWM	47.7	70.12	62.83	36.21	/	2.89
			S.D.	14.52	35.19	35.93	29.42	/	0.44
	43	Gaotang Lake	CV(%)	0.304	0.502	0.572	0.812	/	0.152
			background	24.16	80.81	30.47	35		0.061
			SNWM	23.621	74.094	25.315	39.619	74.648	0.42
	44	Hongze Lake	S.D.	3.07	23.894	8.28	11.48	24.54	0.09

						2	2	
		CV(%)	0.13	0.322	0.327	0.29	0.329	0.215
		background	23.4	64.8	22	32.83	75.6	0.085
		SNWM	39.49	120.16	33.152	37.148	89.299	0.549
45	Nansi Lake	S.D.	15.265	103.858	11.015	8.784	18.621	1.378
		CV(%)	0.387	0.864	0.332	0.236	0.209	2.509
		background	33.9	90	15	31.6	60	0.077
		SNWM	24.101	151.686	66.614	48.812	91.895	4.988
		S.D.	12.088	94.219	51.124	24.043	63.626	5.057
46	Luoma Lake	CV(%)	0.502	0.621	0.767	0.493	0.692	1.014
		background	22.3	62.6	26.2	26.7	77.8	0.126
		SNWM	35.256	81.116	18.288	9.66	62.364	0.276
		S.D.	31.466	38.4	10.727	4.64	29.709	0.218
47	Yunmeng Lake	CV(%)	0.893	0.473	0.587	0.48	0.476	0.791
		background	24	63.5	25.8	25.8	66	0.084
		SNWM	46.73	138.71	42.89	19.37	62.06	0.24
		S.D.	14.44	31.99	9.96	4.82	8.52	0.14
48	Daming Lake	CV(%)	0.309	0.231	0.232	0.249	0.137	0.583
		background	18.45	57.87	23.18	27.21	52.75	0.047
		SNWM	16.48	53.02	22.17	16.02	50.09	0.37
49	Tiane Lake	S.D.	9.54	22.889	2.84	8.33	29.578	0.218

			CV(%)	0.579	0.432	0.128	0.52	0.591	0.589
			background	13.7	39.9	13.98	19	52.8	0.039
			SNWM	22.7	55.1	27.1	/	58.1	0.353
	50	Shahu Lake	S.D.	4.87	10.1	7.74	/	6.01	0.11
			CV(%)	0.215	0.183	0.286	/	0.103	0.311
			background	19	52	19	25	61	0.12
Yellow River Basin			SNWM	42.248	92.763	31.777	40.143	82.307	0.283
	51	Dongping Lake	S.D.	13.832	22.877	14.542	5.701	10.218	0.091
			CV(%)	0.327	0.247	0.458	0.142	0.124	0.32
			background	24	63.5	25.8	25.8	66	0.077
			SNWM	28.032	68.591	34.319	23.59	72.168	0.203
	52	Hengshui Lake	S.D.	12.808	14.932	15.611	/	31.712	0.087
			CV(%)	0.457	0.218	0.455	/	0.439	0.429
			background	22.6	74.2	26	26.9	61	0.09
			SNWM	31.544	106.641	43.13	27.583	58.704	0.743
Haihe River Basin	53	Baiyangdian Lake	S.D.	10.967	20.307	6.192	10.76	10.135	0.209
			CV(%)	0.348	0.19	0.144	0.39	0.173	0.281
			background	22.6	74.2	26	26.9	61	0.09
			SNWM	26.915	74.585	7.743	28.124	69.863	0.747
	54	Dongchang Lake	S.D.	17.246	32.304	9.282	6.567	10.969	0.245
			CV(%)	0.641	0.433	1.199	0.234	0.157	0.328

			background	16.8	52.7	20.2	19.5	20	0.054
			SNWM	37.86	74.97	59.84	30.28	61.13	/
	55	Yuqiao Lake	S.D.	/	/	/	/	/	/
			CV(%)	/	/	/	/	/	/
			background	22.6	74.2	26	26.9	61	
			SNWM	59.4	103.91	20.16	20.71	87.29	0.52
			S.D.	8.86	18.89	4.11	2.61	18.56	0.17
	56	Qilihai Lake	CV(%)	0.149	0.182	0.204	0.126	0.213	0.327
			background	21.7	62	20	23	63.9	0.075
			SNWM	16.999	63.776	14.62	3.9	17.647	0.16
			S.D.	10.692	43.462	8.659	1.88	15.575	0.166
	57	Hulun Lake	CV(%)	0.629	0.681	0.592	0.482	0.883	1.037
			background	35	100	35	17.2	90	0.2
			SNWM	36.078	120.155	95.554	/	164.107	13.93
			S.D.	12.275	32.57	27.182	/	14.093	1.913
Northeastern River Basins	58	Yaoquan Lake	CV(%)	0.34	0.271	0.284	/	0.086	0.137
			background	30	80	25		60	0.5
			SNWM	17.38	69.9	27.88	29.92	63.49	0.19
			S.D.	1.87	17.79	3.43	6.34	10.26	0.07
	59	Lianhuan Lake	CV(%)	0.108	0.255	0.123	0.212	0.162	0.368
			background	18.74	57.34	22.7	24.16	50.82	0.079
			SNWM	/	59.24	33.73	/	48.56	0.32
	60	Keqin Lake	S.D.	/	10.74	13.36	/	15.08	0.18

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			CV(%)	/	0.181	0.396	/	0.311	0.563
			background		52.05	20.23		42.46	0.073
			SNWM	56.28	142.3	17.44	44.44	97.9	/
	61	Dahuofang Lake	S.D.	/	/	/	/	/	/
			CV(%)	/	/	/	/	/	/
			background	22.6	74.2	26	26.9	61	
			SNWM	25.84	101.625	24.35	35.525	71.695	/
	62	Songhua Lake	S.D.	26.801	26.741	14.634	22.627	36.029	/
			CV(%)	1.037	0.263	0.601	0.637	0.503	/
			background	22.6	74.2	26	26.9	61	
			SNWM	7.105	55.535	16.23	26.09	58.335	0.13
	63	Xiaoxingkai Lake	S.D.	5.35	12.19	6.72	/	36.34	0.04
			CV(%)	0.753	0.22	0.414	/	0.623	0.308
			background	22.6	74.2	26	26.9	61	0.09
			SNWM	12.55	30.28	10.61	16.3	7.38	0.25
			S.D.	1.812	9.43	3.65	3.058	1.29	0.05
	64	Manasi Lake	CV(%)	0.144	0.311	0.344	0.188	0.175	0.2
Northern Inland and Xinjiang River Basins			background	28.52	75.44	17.26	24.5	51.44	0.15
			SNWM	39.89	114.59	39.57	28.27	51.49	0.17
			S.D.	3.54	31.79	5.18	4.28	2.95	0.46
	65	Aibi Lake	CV(%)	0.089	0.277	0.131	0.151	0.057	2.706
			background	26.7	68.8	19.4	26.6	49.3	0.12

	66	Wulungu Lake	SNWM	18.751	58.738	13.523	12.437	33.278	0.116
			S.D.	14.368	29.593	29.517	9.377	16.401	0.121
			CV(%)	0.766	0.504	2.183	0.754	0.493	1.043
			background	35	150	60	26	80	0.5
	67	Bositeng Lake	SNWM	19.635	81.093	28.636	16.34	22.545	0.319
			S.D.	6.27	73.216	20.115	6.31	15.669	0.272
			CV(%)	0.319	0.903	0.702	0.386	0.695	0.854
			background	13.9	36.4	8.79	13.38	23.61	0.1
	68	Qinggeda Lake	SNWM	46.73	99.72	22.67	11.36	82.94	/
			S.D.	6.87	10.08	2.72	17.27	13.44	/
			CV(%)	0.147	0.101	0.12	1.52	0.162	/
			background	26.7	68.8	19.4	26.6	49.3	
	69	Chaiwobao Lake	SNWM	28.37	74.84	38.57	36.61	34.24	/
			S.D.	4.87	11.8	4.88	5.15	23.46	/
			CV(%)	0.172	0.158	0.127	0.141	0.685	/
			background	26.7	68.8	19.4	26.6	49.3	
	70	Qinghai Lake	SNWM	17.941	65.22	18.666	17.369	47.001	0.21
			S.D.	6.844	23.895	5.707	5.098	17.665	0.11
			CV(%)	0.381	0.366	0.306	0.294	0.376	0.524
			background	19.72	64.28	20.47	24.96	54.17	0.14
Southwest International River	71	Yilong Lake	SNWM	30.394	86.041	51.888	35.168	85.687	0.77
			S.D.	12.19	28.709	12.12	11.82	24.57	0.22

Basin		7		5	8	7	2
	CV(%)	0.401	0.334	0.234	0.336	0.287	0.288
	background	46.3	90	40.6	42.5	65.2	0.22
	PEL	197	315	36	91.3	90	3.53

Table S2. Extended Data Table 2 Statistical Table of I_{geo} Index for Heavy Metals in Lake Sediments

River Basin	serial number	study area	I_{geo}/Level					
			Cu	Zn	Pb	Ni	Cr	Cd
Pearl River Basin	1	Xiaohai Lake	-3.93/0	-2.78/0	-1.97/0			-3.24/0
	2	Xingyun Lake	0.81/1	-0.46/0	-0.53/0	-1.11/0	-0.74/0	0.58/1
	3	Fuxian Lake	-1.12/0	-0.15/0	0.14/1	-0.72/0	-0.65/0	4/5
	4	Dawangtan Lake	-0.28/0	-0.06/0	0.21/1	-0.67/0	-0.82/0	1.57/2
	5	Baiyun Lake	3.25/4	2.9/3	0.69/1	2.31/3	0.77/1	5.63/6
	6	Liuhua Lake	1.64/2	2.16/3	0.58/1	0.17/1	-0.69/0	3.5/4
	7	Dongshan Lake	2.83/3	2.93/3	1.17/2	2.42/3	0.62/1	4.9/5
	8	Huadu Lake	2.07/3	1.47/2	0.02/1	0.57/1	-0.26/0	3.6/4
	9	Jinshan Lake	-1.8/0	-0.91/0	-0.55/0		0.87/1	0.37/1
Yangtze River Basin	10	Lugu Lake	-0.4/0		-2.62/0		-1.25/0	
	11	Qionghai Lake	-0.98/0	0.15/1	-0.79/0		-0.3/0	2.18/3
	12	Caohai Lake	-0.59/0	0.61/1	0.15/1	-0.24/0	-0.54/0	4.73/5
	13	Yelang Lake	-0.09/0	0.2/1	2.05/3	-0.31/0	-0.82/0	1.92/2
	14	Baihua Lake	-0.23/0	1.26/2	-0.37/0		-0.56/0	0.81/1
	15	Hongfeng Lake	0.39/1	-0.08/0	-0.83/0	1.66/2	-0.79/0	0.77/1
	16	Huaxi Lake	0.80/1	0.03/1	-0.07/0		-0.11/0	-0.85/0
	17	Yutan Lake	1.01/2	0.13/1	0.44/1		-1.36/0	0.3/1
	18	Changshou Lake	-1.14/0	0.78/1	0.15/1		-2.1/0	1.01/2
	19	Danjiangkou Lake	0.88/1	1.39/2	-1.51/0	-0.30/0	0.75/1	2.94/3
	20	Dongting Lake	0.3/1	0.14/1	0.21/1	0.15/1	0.09/1	2.63/3
	21	Danan Lake	-0.17/0	-0.71/0	0.46/1		-1.38/0	1.09/2
	22	Moshui Lake	0.91/1	0.91/1	-0.71/0	0.21/1	-0.18/0	
	23	Tangxun Lake	0.04/1	0.22/1	0.1/1	-0.59/0	-0.67/0	1.82/2

	24	Liangzi Lake	0.37/1	0.43/1	-0.19/0	-0.54/0	-0.69/0	1.38/2
	25	Qingshan Lake	1.93/2	1.24/2	1.03/2	-0.27/0	-1.14/0	
	26	Daye Lake	3.39/4	2.22/3	2.11/3	0.66/1		7/6
	27	Wanghu Lake	0.355/1	0.32/1	-0.13/0		-0.14/0	1.45/2
	28	Xianghu Lake	0.7/1	4.82/5	2.25/3	-0.13/0	-1.18/0	
	29	Poyang Lake	0.12/1	-0.04/0	-0.15/0	-0.42/0	-0.39/0	2.25/3
	30	Shengjin Lake	0.56/1	0.34/1	0.46/1			0.51/1
	31	Chaohu Lake	-0.07/0	1.01/2	0.45/1	-0.61/0	-0.78/0	6.28/6
	32	Shijiu Lake	0.11/1	0.3/1	0.09/1	-0.25/0	-0.26/0	0.26/1
	33	Mochou Lake	-0.34/0	0.48/1	0.26/1	-0.75/0	-1.22/0	2.6/3
	34	Gucheng Lake	-0.41/0	-0.17/0	-0.2/0	-0.36/0	-0.45/0	0.49/1
	35	Changdang Lake	0.12/1	0.43/1	-0.04/0	-0.14/0	-0.45/0	1.38/2
	36	Taihu Lake	-0.37/0	-0.26/0	-0.2/0	0.2/1	-0.76/0	1.58/2
	37	Yangcheng Lake	0.63/1	0.54/1	-0.05/0	0.35/1	-0.31/0	1.3/2
	38	Dishui Lake	-0.36/0		-3.63/0		-4.92/0	3.14/4
	39	Suyahu Lake	-0.18/0	-0.1/0	0.24/1	-0.19/0	-0.29/0	1.47/2
	40	Baogong Lake	2.52/3	1.65/2	1.58/2	0.38/1	1.3/2	0.18/1
	41	Wabu Lake	-0.74/0	0.1/1	0.09/1		-0.48/0	
	42	Jiaogang Lake	-0.03/0	0.37/1	-0.76/0	-0.12/0		1.24/2
	43	Gaotang Lake	0.3/1	-0.96/0	0.22/1	-0.67/0		4.98/5
Huai River Basin	44	Hongze Lake	-0.58/0	-0.49/0	-0.44/0	-0.41/0	-0.69/0	1.67/2
	45	Nansi Lake	-0.5/0	-0.28/0	0.44/1	-0.41/0	-0.04/0	3.07/4
	46	Luoma Lake	-0.62/0	0.55/1	0.61/1	0.09/1	-0.52/0	4.7/5
	47	Yunmeng Lake	-0.09/0	-0.46/0	-1.25/0	-2.25/0	-0.83/0	1.01/2
	48	Daming Lake	0.67/1	0.61/1	0.25/1	-1.12/0	-0.36/0	1.6/2
	49	Tiane Lake	-0.42/0	-0.31/0	0.06/1	-1/0	-0.88/0	2.43/3
Yellow River Basin	50	Shahu Lake	-0.35/0	-0.52/0	-0.14/0		-0.66/0	0.93/1
	51	Dongping Lake	0.12/1	-0.09/0	-0.47/0	0.04/1	-0.28/0	1.2/2
	52	Hengshui Lake	-0.4/0	-0.74/0	-0.37/0		-0.53/0	0.44/1
Haihe River Basin	53	Baiyangdian Lake	-0.2/0	-0.1/0	0.12/1	-0.69/0	-0.67/0	2.38/3
	54	Dongchang Lake	-0.06/0	-0.27/0	-1.82/0	-0.1/0	1.18/2	3.11/4
	55	Yuqiao Lake	0.16/1	-0.57/0	0.62/1	-0.41/0	-0.58/0	

	56	Qilihai Lake	0.86/1	0.14/1	-0.6/0	-0.74/0	-0.16/0	2.09/3
	57	Hulun Lake	-1.82/0	-1.39/0	-1.99/0	-2.88/0	-3.11/0	-0.87/0
	58	Yaoquan Lake	-0.37/0	-0.06/0	1.28/2		0.86/1	4.2/5
	59	Lianhuan Lake	-0.69/0	-0.36/0	-0.3/0	-0.3/0	-0.28/0	0.6/1
Northeastern River Basins	60	Keqin Lake		-0.42/0	0.02/1		-0.48/0	1.38/2
	61	Dahuofang Lake	0.73/1	0.35/1	-1.16/0	0.14/1	0.10/1	
	62	Songhua Lake	-0.51/0	-0.21/0	-0.88/0	-0.37/0	-0.55/0	
	63	Xiaoxingkai Lake	-2.44/0	-1.05/0	-1.38/0	-0.63/0	-0.82/0	-0.15/0
	64	Manasi Lake	-1.78/0	-2.01/0	-1.4/0	-1.2/0	-3.41/0	0.14/1
	65	Aibi Lake	-0.01/0	0.06/1	0.43/1	-0.51/0	-0.52/0	0.76/1
Northern Inland and Xinjiang River Basins	66	Wulungu Lake	-1.63/0	-2.15/0	-2.03/0	-1.8/0	-2.01/0	-2.74/0
	67	Bositeng Lake	-0.14/0	0.41/1	0.91/1	-0.39/0	-0.81/0	1.02/2
	68	Qinggeda Lake	0.2/1	-0.06/0	-0.37/0	-1.6/0	0.15/1	
	69	Chaiwobao Lake	-0.53/0	-0.48/0	0.4/1	-0.12/0	-1.23/0	
	70	Qinghai Lake	-0.85/0	-0.66/0	-0.78/0	-1.19/0	-0.93/0	-0.17/0
Southwest International River Basin	71	Yilong Lake	-1.33/0	-0.76/0	-0.28/0	-0.95/0	-0.26/0	1.13/2

Table S3. Extended Data Table 3 Statistical Table of RI Indices for Heavy Metals in Lake Sediments

River Basin	serial number	study area	Index	E_r^i						RI
				Cu	Zn	Pb	Ni	Cr	Cd	
Pearl River Basin	1	Xiaohai Lake Xingyun Lake	mean value	0.61	0.25	2.05			5.53	8.44
			Contribution to the RI /%	7.227	2.962	24.289			65.521	100
	2	Fuxian Lake Dawangtan Lake	mean value	5.98	1.09	5.19	3.51	1.81	67.17	84.75
			Contribution to the RI /%	7.056	1.286	6.124	4.142	2.136	79.257	100
	3	Baiyun Lake Liuhua Lake	mean value	3.61	1.37	9.05	4.61	1.97	786.25	806.86
			Contribution to the RI /%	0.447	0.17	1.122	0.571	0.244	97.446	100
	4	Dongshan Lake Huadu Lake	mean value	1.856	2.155	2.609	1.414	1.275	6.701	16.009
			Contribution to the RI /%	11.594	13.46	16.296	8.833	7.962	41.856	100

	5	Jinshan Lake Lugu Lake	mean value	81.31	12.59	12.37	40.33	5.63	2487.78	2640.01
			Contribution to the RI /%	3.08	0.477	0.469	1.528	0.213	94.234	100
	6	Qionghai Lake Caohai Lake	mean value	25.26	7.39	11.57	8.59	1.93	566.42	621.16
			Contribution to the RI /%	4.067	1.19	1.863	1.383	0.311	91.187	100
	7	Yelang Lake Baihua Lake	mean value	54.5	11.68	17.62	39.13	4.67	1346.85	1474.45
			Contribution to the RI /%	3.696	0.792	1.195	2.654	0.317	91.346	100
	8	Hongfeng Lake Huaxi Lake	mean value	36.53	4.5	7.76	11.94	2.91	551.23	614.87
			Contribution to the RI /%	5.941	0.732	1.262	1.942	0.473	89.65	100
	9	Yutan Lake Changshou Lake	mean value	2.24	0.54	5		5.8	66.41	79.99
			Contribution to the RI /%	2.8	0.675	6.251		7.251	83.023	100
	10	Danjiangkou Lake Dongting Lake	mean value	6.57		1.4		1.03		9
			Contribution to the RI /%	73		15.556		11.444		100
	11	Danan Lake Moshui Lake	mean value	3.87	1.6	4.41		2.46	249.51	261.85
			Contribution to the RI /%	1.478	0.611	1.684		0.939	95.287	100
	12	Tangxun Lake Liangzi Lake	mean value	5.98	2.62	9.03	6.7	2.33	631.98	658.64
			Contribution to the RI /%	0.908	0.398	1.371	1.017	0.354	95.952	100
Yangtze River Basin	13	Qingshan Lake Daye Lake	mean value	8.55	2.03	27.52	7.28	1.97	179.79	227.14
			Contribution to the RI /%	3.764	0.894	12.116	3.205	0.867	79.154	100
	14	Wanghu Lake Xianghu Lake	mean value	7.24	3.7	6.56		2.15	87.79	107.44
			Contribution to the RI /%	6.739	3.444	6.106		2.001	81.711	100
	15	Poyang Lake Shengjin Lake	mean value	11.27	1.47	4.89	24.28	1.79	70.64	114.34
			Contribution to the RI /%	9.857	1.286	4.277	21.235	1.566	61.781	100
	16	Chaohu Lake Shijiu Lake	mean value	3.91	2.32	2.16		2.1	1.33	11.82
			Contribution to the RI /%	33.08	19.628	18.274		17.766	11.252	100
	17	Mochou Lake	mean value	15.24	1.65	10.36		1.17	55.96	84.38

	Gucheng Lake	Contribution to the RI /%	18.061	1.955	12.278		1.387	66.319	100
18	Changdang Lake Taihu Lake	mean value	4.07	2.89	9.39		0.73	104.2	121.28
		Contribution to the RI /%	3.356	2.383	7.742		0.602	85.917	100
19	Yangcheng Lake Dishui Lake	mean value	4.154	5.925	0.791	1.828	3.774	17.318	33.789
		Contribution to the RI /%	12.293	17.535	2.34	5.41	11.168	51.254	100
20	Suyahu Lake Baogong Lake	mean value	9.93	1.77	9.95	8.52	3.38	232.76	266.31
		Contribution to the RI /%	3.729	0.665	3.736	3.199	1.269	87.402	100
21	Wabu Lake Jiaogang Lake	mean value	7	0.97	10.59		1.23	101.49	121.28
		Contribution to the RI /%	5.772	0.8	8.732		1.014	83.682	100
22	Gaotang Lake Hongze Lake	mean value	14.83	3.24	5.43	8.95	2.96		35.41
		Contribution to the RI /%	41.881	9.15	15.335	25.275	8.359		100
23	Nansi Lake Luoma Lake	mean value	8.06	1.83	8.31	5.06	1.9	162.79	187.95
		Contribution to the RI /%	4.288	0.974	4.421	2.692	1.011	86.613	100
24	Yunmeng Lake Daming Lake	mean value	10.05	2.06	7.09	5.46	1.97	119.6	146.23
		Contribution to the RI /%	6.873	1.409	4.849	3.734	1.347	81.789	100
25	Tiane Lake Shahu Lake	mean value	32.98	3.59	15.44	6.22	1.38		59.61
		Contribution to the RI /%	55.326	6.022	25.902	10.434	2.315		100
26	Dongping Lake Hengshui Lake	mean value	80.93	7	32.62	13.34		6423.52	6557.41
		Contribution to the RI /%	1.234	0.107	0.497	0.203		97.958	100
27	Baiyangdian Lake Dongchang Lake	mean value	10.15	1.86	6.97		2.8	123.84	145.62
		Contribution to the RI /%	6.97	1.277	4.786		1.923	85.043	100
28	Yuqiao Lake Qilihai Lake	mean value	12.53	30.74	34.56	7.46	1.5		86.79
		Contribution to the RI /%	14.437	35.419	39.82	8.595	1.728		100
29	Hulun Lake	mean value	8.84	1.56	7.31	6.35	2.62	237.24	263.92

	Yaoquan Lake	Contribution to the RI /%	3.349	0.591	2.77	2.406	0.993	89.891	100
30	Lianhuan Lake Keqin Lake	mean value	11.51	1.91	10.77			59.51	83.7
		Contribution to the RI /%	13.751	2.282	12.867			71.099	100
31	Dahuofang Lake Songhua Lake	mean value	8.26	3.01	10.54	5.18	1.87	2924.68	2953.54
		Contribution to the RI /%	0.28	0.102	0.357	0.175	0.063	99.023	100
32	Xiaoxingkai Lake Manasi Lake	mean value	8.12	1.93	8.18	6.27	2.52	57.19	84.21
		Contribution to the RI /%	9.643	2.292	9.714	7.446	2.993	67.914	100
33	Aibi Lake Wulungu Lake	mean value	6.13	2.12	9.06	4.69	1.5	304.92	328.42
		Contribution to the RI /%	1.867	0.646	2.759	1.428	0.457	92.845	100
34	Bositeng Lake Qinggeda Lake	mean value	5.7	1.35	6.57	5.89	2.19	68.65	90.35
		Contribution to the RI /%	6.309	1.494	7.272	6.519	2.424	75.982	100
35	Chaiwobao Lake Qinghai Lake	mean value	8.41	2.11	7.46	6.85	2.2	123.16	150.19
		Contribution to the RI /%	5.6	1.405	4.967	4.561	1.465	82.003	100
36	Yilong Lake Xiaohai Lake	mean value	6.54	1.43	6.85	9.09	1.87	149.01	174.79
		Contribution to the RI /%	3.742	0.818	3.919	5.201	1.07	85.251	100
37	Xingyun Lake Fuxian Lake	mean value	12.76	2.46	7.34	10.02	2.46	130.46	165.5
		Contribution to the RI /%	7.71	1.486	4.435	6.054	1.486	78.828	100
38	Dawangtan Lake Baiyun Lake	mean value	6.27		0.67		0.1	401.36	408.4
		Contribution to the RI /%	1.535		0.164		0.024	98.276	100
Huai River Basin	39 Liuhua Lake Dongshan Lake	mean value	7.05	1.53	9.35	7.99	2.78	138.93	167.63
		Contribution to the RI /%	4.206	0.913	5.578	4.766	1.658	82.879	100
	40 Huadu Lake Jinshan Lake	mean value	43.17	5.12	25.07	9.91	7.5	53.8	144.57
		Contribution to the RI /%	29.861	3.542	17.341	6.855	5.188	37.214	100
	41 Lugu Lake Qionghai Lake	mean value	4.68	1.71	8.18		2.42		16.99
		Contribution to	27.546	10.065	48.146		14.244		100

		the RI /%							
	42	Caohai Lake Yelang Lake	mean value	7.42	1.98	4.45	6.96	108.05	128.86
			Contribution to the RI /%	5.758	1.537	3.453	5.401	83.851	100
	43	Baihua Lake Hongfeng Lake	mean value	9.81	0.87	10.18	5.22	1418.64	1444.72
			Contribution to the RI /%	0.679	0.06	0.705	0.361	98.195	100
	44	Huaxi Lake Yutan Lake	mean value	5.07	1.16	5.77	6.02	1.95	149.37	169.34
			Contribution to the RI /%	2.994	0.685	3.407	3.555	1.152	88.207	100
	45	Changshou Lake Danjiangkou Lake	mean value	5.85	1.35	10.84	5.91	2.97	182.47	209.39
			Contribution to the RI /%	2.794	0.645	5.177	2.822	1.418	87.144	100
	46	Dongting Lake Danan Lake	mean value	5.52	2.45	12.84	9.17	2.36	1219.43	1251.77
			Contribution to the RI /%	0.441	0.196	1.026	0.733	0.189	97.416	100
	47	Moshui Lake Tangxun Lake	mean value	7.53	1.29	3.46	1.86	1.94	97.53	113.61
			Contribution to the RI /%	6.628	1.135	3.046	1.637	1.708	85.846	100
	48	Liangzi Lake Qingshan Lake	mean value	12.48	2.41	9.22	3.56	2.35	151.21	181.23
			Contribution to the RI /%	6.886	1.33	5.087	1.964	1.297	83.435	100
	49	Daye Lake Wanghu Lake	mean value	5.99	1.36	7.87	4.25	1.92	280.49	301.88
			Contribution to the RI /%	1.984	0.451	2.607	1.408	0.636	92.914	100
Yellow River Basin	50	Xianghu Lake Poyang Lake	mean value	5.93	1.06	7.11		1.92	87.9	103.92
			Contribution to the RI /%	5.706	1.02	6.842		1.848	84.584	100
	51	Shengjin Lake Chaohu Lake	mean value	8.72	1.47	6.1	7.75	2.48	109.91	136.43
			Contribution to the RI /%	6.392	1.077	4.471	5.681	1.818	80.561	100
Haihe River Basin	52	Shijiu Lake Mochou Lake	mean value	6.14	0.94	6.62	4.38	2.4	67.76	88.24
			Contribution to the RI /%	6.958	1.065	7.502	4.964	2.72	76.791	100
	53	Gucheng Lake Changdang Lake	mean value	6.98	1.42	8.34	5.26	1.94	248.94	272.88
			Contribution to	2.558	0.52	3.056	1.928	0.711	91.227	100

			the RI /%							
	54	Taihu Lake Yangcheng Lake	mean value	7.57	1.42	1.81	7.28	7.01	417.26	442.35
			Contribution to the RI /%	1.711	0.321	0.409	1.646	1.585	94.328	100
	55	Dishui Lake Suyahu Lake	mean value	2.513	1.516	3.452	1.688	1.503		10.672
			Contribution to the RI /%	23.545	14.201	32.348	15.821	14.085		100
	56	Baogong Lake Wabu Lake	mean value	13.82	1.68	5.02	4.48	2.72	207.37	235.09
			Contribution to the RI /%	5.879	0.715	2.135	1.906	1.157	88.209	100
	57	Jiaogang Lake Gaotang Lake	mean value	2.48	0.66	2.05	1.1	0.38	23.91	30.58
			Contribution to the RI /%	8.11	2.158	6.704	3.597	1.243	78.188	100
	58	Hongze Lake Nansi Lake	mean value	6.01	1.51	18.94		5.49	840.05	872
			Contribution to the RI /%	0.689	0.173	2.172		0.63	96.336	100
	59	Luoma Lake Yunmeng Lake	mean value	4.61	1.23	6.13	6.13	2.52	73.32	93.94
			Contribution to the RI /%	4.907	1.309	6.525	6.525	2.683	78.05	100
Northeastern River Basins	60	Daming Lake Tiane Lake	mean value		1.14	8.21		2.26	131.65	143.26
			Contribution to the RI /%		0.796	5.731		1.578	91.896	100
	61	Shahu Lake Dongping Lake	mean value	3.735	2.877	1.006	2.478	2.407		12.504
			Contribution to the RI /%	29.874	23.007	8.047	19.819	19.253		100
	62	Hengshui Lake Baiyangdian Lake	mean value	5.96	1.38	4.77	6.53	2.36		21
			Contribution to the RI /%	28.381	6.571	22.714	31.095	11.238		100
	63	Dongchang Lake Yuqiao Lake	mean value	1.61	0.75	3.1	4.85	1.94	43.4	55.65
			Contribution to the RI /%	2.893	1.348	5.571	8.715	3.486	77.987	100
Northern Inland and Xinjiang River Basins	64	Qilihai Lake Hulun Lake	mean value	2.21	0.4	3.1	3.32	0.29	49.85	59.17
			Contribution to the RI /%	3.735	0.676	5.239	5.611	0.49	84.249	100
	65	Yaoquan Lake Lianhuan Lake	mean value	7.47	1.67	10.21	5.34	2.08	38.81	65.58
			Contribution to the RI /%	11.391	2.547	15.569	8.143	3.172	59.18	100

	66	Keqin Lake Dahuofang Lake	mean value	2.69	0.4	1.09	2.39	0.82	6.68	14.07
			Contribution to the RI /%	19.119	2.843	7.747	16.986	5.828	47.477	100
	67	Songhua Lake Xiaoxingkai Lake	mean value	7.06	2.25	16.7	6.13	1.92	87.17	121.23
			Contribution to the RI /%	5.824	1.856	13.775	5.057	1.584	71.905	100
	68	Manasi Lake Aibi Lake	mean value	8.72	1.45	5.86	2.19	3.4		21.62
			Contribution to the RI /%	40.333	6.707	27.105	10.13	15.726		100
	69	Wulungu Lake Bositeng Lake	mean value	5.29	1.09	9.86	6.86	1.37		24.47
			Contribution to the RI /%	21.618	4.454	40.294	28.034	5.599		100
	70	Qinggeda Lake Chaiwobao Lake	mean value	4.53	1.01	4.54	3.48	1.74	45.44	60.74
			Contribution to the RI /%	7.458	1.663	7.474	5.729	2.865	74.811	100
Southwest International River Basin	71	Qinghai Lake	mean value	3.28	0.96	6.36	4.14	2.68	103.66	121.08
			Contribution to the RI /%	2.709	0.793	5.253	3.419	2.213	85.613	100

Table S4. Extended Data Table 4 Statistical Table of STU Indices for Heavy Metals in Lake Sediments

River Basin	serial number	study area	Index	E_r^i						STU/ Toxicity Level
				Cu	Zn	Pb	Ni	Cr	Cd	
Pearl River Basin	1	Xiaohai Lake Xingyun Lake	mean value	0.02	0.11	0.68			0.02	0.83
			Contribution to the TU /%	2.41	13.253	81.928			2.41	LOW
	2	Fuxian Lake Dawangtan Lake	mean value	0.37	0.49	2.18	0.37	0.94	0.35	4.7
			Contribution to the TU /%	7.872	10.426	46.383	7.872	20	7.447	Moderate
	3	Baiyun Lake Liuhua Lake	mean value	0.37	0.51	2.23	0.51	1.02	2.22	6.86
			Contribution to the TU /%	5.394	7.434	32.507	7.434	14.869	32.362	highly
	4	Dongshan Lake Huadu Lake	mean value	0.17	0.34	1.16	0.31	0.83	0.2	3.01
			Contribution to the TU /%	5.648	11.296	38.538	10.299	27.575	6.645	LOW
	5	Jinshan Lake	mean value	1.37	1.87	2.48	1.29	1.61	1.38	10

		Lugu Lake	Contribution to the TU /%	13.7	18.7	24.8	12.9	16.1	13.8	highly
	6	Qionghai Lake Caohai Lake	mean value	0.44	1.15	2.31	0.27	0.53	0.32	5.02
			Contribution to the TU /%	8.765	22.908	46.016	5.378	10.558	6.375	Moderate
	7	Yelang Lake Baihua Lake	mean value	0.94	1.75	3.48	1.33	1.34	0.77	9.61
			Contribution to the TU /%	9.781	18.21	36.212	13.84	13.944	8.012	highly
	8	Hongfeng Lake Huaxi Lake	mean value	0.64	0.67	1.54	0.37	0.82	0.32	4.36
			Contribution to the TU /%	14.679	15.367	35.321	8.486	18.807	7.339	Moderate
	9	Yutan Lake Changshou Lake	mean value	0.13	0.4	0.79		2.75	0.19	4.26
			Contribution to the TU /%	3.052	9.39	18.545		64.554	4.46	Moderate
	10	Danjiangkou Lake Dongting Lake	mean value	0.3		0.31		0.41		1.02
			Contribution to the TU /%	29.412		30.392		40.196		LOW
	11	Danan Lake Moshui Lake	mean value	0.13	0.48	0.89		0.98	0.19	2.67
			Contribution to the TU /%	4.869	17.978	33.333		36.704	7.116	LOW
	12	Tangxun Lake Liangzi Lake	mean value	0.18	0.71	1.49	0.52	1.05	1.43	5.38
			Contribution to the TU /%	3.346	13.197	27.695	9.665	19.517	26.58	Moderate
	13	Qingshan Lake Daye Lake	mean value	0.25	0.57	4.58	0.53	0.87	0.55	7.35
Yangtze River Basin			Contribution to the TU /%	3.401	7.755	62.313	7.211	11.837	7.483	highly
	14	Wanghu Lake Xianghu Lake	mean value	0.3	0.99	0.77		0.8	0.22	3.08
			Contribution to the TU /%	9.74	32.143	25		25.974	7.143	LOW
	15	Poyang Lake Shengjin Lake	mean value	0.36	0.46	0.93	2.09	0.96	0.44	5.24
			Contribution to the TU /%	6.87	8.779	17.748	39.885	18.321	8.397	Moderate
	16	Chaohu Lake Shijiu Lake	mean value	0.4	0.39	1		0.94	0.13	2.86
			Contribution to the TU /%	13.986	13.636	34.965		32.867	4.545	LOW
	17	Mochou Lake Gucheng Lake	mean value	0.34	0.42	1.28		0.32	0.21	2.57
			Contribution to	13.23	16.342	49.805		12.451	8.171	LOW

		the TU /%							
18	Changdang Lake Taihu Lake	mean value	0.32	0.2	1.16		0.21	0.13	2.02
		Contribution to the TU /%	15.842	9.901	57.426	0	10.396	6.436	LOW
19	Yangcheng Lake Dishui Lake	mean value	0.329	0.9	0.428	0.407	1.87	0.36	4.294
		Contribution to the TU /%	7.661	20.969	9.957	9.482	43.553	8.379	Moderate
20	Suyahu Lake Baogong Lake	mean value	0.21	0.47	1.3	0.4	0.82	0.74	3.94
		Contribution to the TU /%	5.33	11.929	32.995	10.152	20.812	18.782	LOW
21	Wabu Lake Jiaogang Lake	mean value	0.23	0.29	1.62		0.58	0.13	2.85
		Contribution to the TU /%	8.07	10.175	56.842		20.351	4.561	LOW
22	Gaotang Lake Hongze Lake	mean value	0.62	1.21	2.75	0.73	1.44		6.75
		Contribution to the TU /%	9.185	17.926	40.741	10.815	21.333		highly
23	Nansi Lake Luoma Lake	mean value	0.26	0.46	1.14	0.44	0.95	0.19	3.44
		Contribution to the TU /%	7.558	13.372	33.14	12.791	27.616	5.523	LOW
24	Yunmeng Lake Daming Lake	mean value	0.3	0.54	1.04	0.44	0.93	0.23	3.48
		Contribution to the TU /%	8.621	15.517	29.885	12.644	26.724	6.609	LOW
25	Tiane Lake Shahu Lake	mean value	1	0.96	2.3	0.51	0.66		5.43
		Contribution to the TU /%	18.416	17.68	42.357	9.392	12.155		Moderate
26	Dongping Lake Hengshui Lake	mean value	2.51	1.86	4.93	1.09		9.92	20.31
		Contribution to the TU /%	12.358	9.158	24.274	5.367		48.843	highly
27	Baiyangdian Lake Dongchang Lake	mean value	0.32	0.5	1.03		1.33	0.2	3.38
		Contribution to the TU /%	9.467	14.793	30.473		39.349	5.917	LOW
28	Yuqiao Lake Qilihai Lake	mean value	0.27	5.04	5.85	0.36	0.57		12.09
		Contribution to the TU /%	2.233	41.687	48.387	2.978	4.715		highly
29	Hulun Lake Yaoquan Lake	mean value	0.21	0.39	1.25	0.3	0.67	0.25	3.07
		Contribution to	6.84	12.704	40.717	9.772	21.824	8.143	LOW

		the TU /%							
30	Lianhuan Lake Keqin Lake	mean value	0.19	0.47	1.38			0.27	2.31
		Contribution to the TU /%	8.225	20.346	59.74			11.688	LOW
31	Dahuofang Lake Songhua Lake	mean value	0.26	0.85	1.78	0.39	0.8	4.58	8.66
		Contribution to the TU /%	3.002	9.815	20.554	4.503	9.238	52.887	highly
32	Xiaoxingkai Lake Manasi Lake	mean value	0.2	0.4	1	0.45	1.06	0.05	3.16
		Contribution to the TU /%	6.329	12.658	31.646	14.241	33.544	1.582	LOW
33	Aibi Lake Wulungu Lake	mean value	0.2	0.52	1.24	0.35	0.48	0.56	3.35
		Contribution to the TU /%	5.97	15.522	37.015	10.448	14.328	16.716	LOW
34	Bositeng Lake Qinggeda Lake	mean value	0.14	0.28	0.8	0.42	0.92	0.06	2.62
		Contribution to the TU /%	5.344	10.687	30.534	16.031	35.115	2.29	LOW
35	Chaiwobao Lake Qinghai Lake	mean value	0.2	0.44	0.92	0.49	0.93	0.11	3.09
		Contribution to the TU /%	6.472	14.239	29.773	15.858	30.097	3.56	LOW
36	Yilong Lake Xiaohai Lake	mean value	0.15	0.28	0.98	0.39	0.84	0.19	2.83
		Contribution to the TU /%	5.3	9.894	34.629	13.781	29.682	6.714	LOW
37	Xingyun Lake Fuxian Lake	mean value	0.3	0.53	0.89	0.71	1.04	0.11	3.58
		Contribution to the TU /%	8.38	14.804	24.86	19.832	29.05	3.073	LOW
38	Dawangtan Lake Baiyun Lake	mean value	0.11		0.07		0.02	0.34	0.54
		Contribution to the TU /%	20.37		12.963		3.704	62.963	LOW
Huai River Basin	Liuhua Lake Dongshan Lake	mean value	0.15	0.32	0.75	0.42	0.83	0.12	2.59
39		Contribution to the TU /%	5.792	12.355	28.958	16.216	32.046	4.633	LOW
40	Huadu Lake Jinshan Lake	mean value	0.59	0.56	2.27	0.34	0.73	0.12	4.61
		Contribution to the TU /%	12.798	12.148	49.241	7.375	15.835	2.603	Moderate
41	Lugu Lake Qionghai Lake	mean value	0.12	0.31	1.09		1.01		2.53
		Contribution to the TU /%	4.743	12.253	43.083		39.921		LOW

	42	Caohai Lake Yelang Lake	mean value	0.18	0.51	0.75	0.39		0.06	1.89
			Contribution to the TU /%	9.524	26.984	39.683	20.635		3.175	LOW
	43	Baihua Lake Hongfeng Lake	mean value	0.24	0.23	1.71	0.4		0.83	3.41
			Contribution to the TU /%	7.038	6.745	50.147	11.73		24.34	LOW
	44	Huaxi Lake Yutan Lake	mean value	0.12	0.24	0.7	0.44	0.83	0.12	2.45
			Contribution to the TU /%	4.898	9.796	28.571	17.959	33.878	4.898	LOW
	45	Changshou Lake Danjiangkou Lake	mean value	0.2	0.36	0.92	0.41	1	0.16	3.05
			Contribution to the TU /%	6.557	11.803	30.164	13.443	32.787	5.246	LOW
	46	Dongting Lake Danan Lake	mean value	0.13	0.47	1.79	0.53	1.01	1.4	5.33
			Contribution to the TU /%	2.439	8.818	33.583	9.944	18.949	26.266	Moderate
	47	Moshui Lake Tangxun Lake	mean value	0.17	0.26	0.51	0.11	0.69	0.08	1.82
			Contribution to the TU /%	9.341	14.286	28.022	6.044	37.912	4.396	LOW
	48	Liangzi Lake Qingshan Lake	mean value	0.24	0.44	1.18	0.21	0.69	0.07	2.83
			Contribution to the TU /%	8.481	15.548	41.696	7.42	24.382	2.473	LOW
	49	Daye Lake Wanghu Lake	mean value	0.09	0.17	0.61	0.18	0.55	0.1	1.7
			Contribution to the TU /%	5.294	10	35.882	10.588	32.353	5.882	LOW
Yellow River Basin	50	Xianghu Lake Poyang Lake	mean value	0.12	0.17	0.75		0.65	0.1	1.79
			Contribution to the TU /%	6.704	9.497	41.899		36.313	5.587	LOW
	51	Shengjin Lake Chaohu Lake	mean value	0.21	0.29	0.87	0.44	0.91	0.08	2.8
			Contribution to the TU /%	7.5	10.357	31.071	15.714	32.5	2.857	LOW
Haihe River Basin	52	Shijiu Lake Mochou Lake	mean value	0.15	0.22	0.95		0.79	0.06	2.17
			Contribution to the TU /%	6.912	10.138	43.779		36.406	2.765	LOW
	53	Gucheng Lake Changdang Lake	mean value	0.16	0.33	1.2	0.31	0.65	0.21	2.86
			Contribution to the TU /%	5.594	11.538	41.958	10.839	22.727	7.343	LOW

	54	Taihu Lake Yangcheng Lake	mean value	0.14	0.23	0.22	0.31	0.78	0.21	1.89
			Contribution to the TU /%	7.407	12.169	11.64	16.402	41.27	11.111	LOW
	55	Dishui Lake Suyahu Lake	mean value	0.192	0.238	1.662	0.332	0.679		3.103
			Contribution to the TU /%	6.193	7.669	53.563	10.687	21.887		LOW
	56	Baogong Lake Wabu Lake	mean value	0.3	0.33	0.56	0.23	0.97	0.15	2.54
			Contribution to the TU /%	11.811	12.992	22.047	9.055	38.189	5.906	LOW
	57	Jiaogang Lake Gaotang Lake	mean value	0.08	0.21	0.4	0.04	0.21	0.04	0.98
			Contribution to the TU /%	8.163	21.429	40.816	4.082	21.429	4.082	LOW
	58	Hongze Lake Nansi Lake	mean value	0.18	0.38	2.66		1.82	3.95	8.99
			Contribution to the TU /%	2.002	4.227	29.588		20.245	43.938	highly
	59	Luoma Lake Yunmeng Lake	mean value	0.09	0.22	0.77	0.33	0.7	0.05	2.16
			Contribution to the TU /%	4.167	10.185	35.648	15.278	32.407	2.315	LOW
Northeastern River Basins	60	Daming Lake Tiane Lake	mean value		0.19	0.94		0.54	0.09	1.76
			Contribution to the TU /%		10.795	53.409		30.682	5.114	LOW
	61	Shahu Lake Dongping Lake	mean value	0.286	0.452	0.484	0.487	1.088		2.796
			Contribution to the TU /%	10.216	16.155	17.324	17.406	38.899		LOW
	62	Hengshui Lake Baiyangdian Lake	mean value	0.13	0.32	0.68	0.38	0.79		2.3
			Contribution to the TU /%	5.652	13.913	29.565	16.522	34.348		LOW
	63	Dongchang Lake Yuqiao Lake	mean value	0.04	0.17	0.45	0.29	0.64	0.04	1.63
			Contribution to the TU /%	2.454	10.429	27.607	17.791	39.264	2.454	LOW
Northern Inland and Xinjiang River Basins	64	Qilihai Lake Hulun Lake	mean value	0.06	0.1	0.29	0.18	0.08	0.07	0.78
			Contribution to the TU /%	7.692	12.821	37.179	23.077	10.256	8.974	LOW
	65	Yaoquan Lake Lianhuan Lake	mean value	0.2	0.36	1.1	0.31	0.57	0.04	2.58
			Contribution to the TU /%	7.752	13.953	42.636	12.016	22.093	1.55	LOW
	66	Keqin Lake	mean value	0.1	0.19	0.39	0.14	0.36	0.03	1.21

		Dahuofang Lake	Contribution to the TU /%	8.264	15.702	32.231	11.57	29.752	2.479	LOW
	67	Songhua Lake Xiaoxingkai Lake	mean value	0.1	0.26	0.77	0.17	0.25	0.09	1.64
			Contribution to the TU /%	6.098	15.854	46.951	10.366	15.244	5.488	LOW
	68	Manasi Lake Aibi Lake	mean value	0.24	0.32	0.63	0.12	0.92		2.23
			Contribution to the TU /%	10.762	14.35	28.251	5.381	41.256		LOW
	69	Wulungu Lake Bositeng Lake	mean value	0.14	0.24	1.08	0.4	0.39		2.25
			Contribution to the TU /%	6.222	10.667	48	17.778	17.333		LOW
	70	Qinggeda Lake Chaiwobao Lake	mean value	0.09	0.21	0.52	0.19	0.52	0.06	1.59
			Contribution to the TU /%	5.66	13.208	32.704	11.95	32.704	3.774	LOW
Southwest International River Basin	71	Qinghai Lake	mean value	0.15	0.28	1.42	0.38	0.97	0.22	3.42
			Contribution to the TU /%	4.386	8.187	41.52	11.111	28.363	6.433	LOW