Table S1. Quantile regression results under spring.

		(Intercept)	Transparency	DO	PH	COD	TP	TN	Temperature	Conductivity
0.100	estimation	-12.488	-0.509	0.724	15.100	1.220	0.916	-0.158	-0.808	-0.599
	Std.Error	30.846	0.419	1.206	8.928	1.429	0.743	0.537	5.555	0.773
	t-value	-0.405	-1.216	0.601	1.691	0.853	1.233	-0.295	-0.145	-0.775
	p-value	0.686	0.225	0.548	0.092	0.394	0.219	0.768	0.884	0.439
0.200	estimation	-13.092	-0.034	1.132	11.470	1.154	1.097	-0.069	2.034	-0.531
	Std.Error	22.022	0.265	0.744	6.035	0.927	0.456	0.401	3.768	0.812
	t-value	-0.595	-0.130	1.521	1.901	1.244	2.404	-0.171	0.540	-0.654
	p-value	0.553	0.897	0.129	0.058	0.214	0.017	0.864	0.590	0.514
0.300	estimation	-10.486	-0.024	1.696	11.284	1.217	1.339	-0.006	1.827	-0.821
	Std.Error	8.871	0.265	0.555	4.258	0.569	0.325	0.358	0.125	0.551
	t-value	-1.182	-0.090	3.053	2.650	2.141	4.118	-0.017	14.656	-1.490
	p-value	0.238	0.929	0.002	0.009	0.033	0.000	0.986	0.000	0.137
0.400	estimation	0.623	0.183	1.979	5.010	1.484	1.471	-0.356	2.033	-0.533
	Std.Error	16.705	0.263	0.793	4.490	0.913	0.462	0.337	3.260	0.676
	t-value	0.037	0.695	2.496	1.116	1.624	3.185	-1.057	0.624	-0.789
	p-value	0.970	0.488	0.013	0.265	0.105	0.002	0.292	0.533	0.431
0.500	estimation	9.787	0.028	1.584	2.528	1.697	1.167	-0.131	2.631	-1.493
	Std.Error	11.559	0.347	0.839	5.238	0.692	0.424	0.350	0.288	0.743
	t-value	0.847	0.080	1.887	0.483	2.453	2.755	-0.375	9.129	-2.009
	p-value	0.398	0.936	0.060	0.630	0.015	0.006	0.708	0.000	0.046
0.600	estimation	-2.450	0.083	2.145	6.809	0.940	1.571	-0.143	2.915	-0.886
	Std.Error	13.747	0.333	0.843	5.552	0.754	0.367	0.332	1.551	0.702
	t-value	-0.178	0.250	2.543	1.226	1.246	4.281	-0.430	1.880	-1.261
	p-value	0.859	0.803	0.012	0.221	0.214	0.000	0.667	0.061	0.208
0.700	estimation	-2.086	-0.135	1.842	6.724	2.459	0.700	0.281	2.636	-1.390
	Std.Error	11.329	0.176	0.521	3.179	0.755	0.299	0.176	2.027	0.383
	t-value	-0.184	-0.768	3.533	2.115	3.259	2.341	1.598	1.300	-3.627
	p-value	0.854	0.443	0.000	0.035	0.001	0.020	0.111	0.195	0.000
0.800	estimation	6.977	-0.114	1.813	3.818	4.135	-0.015	0.455	0.647	-1.460
	Std.Error	9.241	0.251	0.538	3.743	0.437	0.264	0.250	1.031	0.511
	t-value	0.755	-0.455	3.370	1.020	9.455	-0.057	1.818	0.628	-2.859
	p-value	0.451	0.649	0.001	0.309	0.000	0.954	0.070	0.531	0.005
0.900	estimation	7.324	-0.121	1.340	4.553	4.289	-0.374	0.631	0.777	-1.801
	Std.Error	11.178	0.216	0.465	3.033	0.666	0.268	0.196	2.288	0.469
	t-value	0.655	-0.560	2.884	1.501	6.440	-1.394	3.224	0.340	-3.839
	p-value	0.513	0.576	0.004	0.134	0.000	0.164	0.001	0.734	0.000

Table S2. Quantile regression results under summer.

		(Intercept)	Transparency	DO	PH	COD	TP	TN	Temperature	Conductivity
0.100	estimation	-12.913	0.021	0.490	11.609	-0.232	1.320	-0.303	1.277	0.450
	Std.Error	9.520	0.306	0.404	2.510	0.677	0.388	0.348	1.891	0.817
	t-value	-1.356	0.068	1.214	4.625	-0.342	3.398	-0.870	0.675	0.551
	p-value	0.176	0.945	0.226	0.000	0.732	0.001	0.385	0.500	0.582
0.200	estimation	2.000	0.107	0.094	4.982	0.298	1.627	-0.861	0.110	1.233
	Std.Error	9.397	0.320	0.477	3.527	0.868	0.418	0.303	1.856	0.399
	t-value	0.213	0.333	0.197	1.412	0.343	3.894	-2.841	0.060	3.093
	p-value	0.832	0.740	0.844	0.159	0.732	0.000	0.005	0.953	0.002
0.300	estimation	7.849	0.087	0.433	1.719	0.752	1.287	-0.578	0.244	1.035
	Std.Error	7.824	0.260	0.284	2.372	0.650	0.265	0.288	1.503	0.434
	t-value	1.003	0.334	1.525	0.725	1.156	4.863	-2.009	0.162	2.385
	p-value	0.317	0.739	0.128	0.469	0.249	0.000	0.045	0.871	0.018
0.400	estimation	18.839	-0.154	0.778	-2.286	1.614	0.748	-0.296	-0.555	0.544
	Std.Error	6.961	0.227	0.300	2.135	0.466	0.253	0.250	1.244	0.384
	t-value	2.706	-0.679	2.595	-1.071	3.463	2.955	-1.185	-0.446	1.415
	p-value	0.007	0.498	0.010	0.285	0.001	0.003	0.237	0.656	0.158
0.500	estimation	21.857	0.022	0.642	-2.816	2.111	0.572	-0.097	-0.969	0.376
	Std.Error	6.403	0.198	0.338	1.937	0.489	0.254	0.218	1.235	0.309
	t-value	3.414	0.110	1.899	-1.454	4.312	2.252	-0.445	-0.785	1.219
	p-value	0.001	0.912	0.059	0.147	0.000	0.025	0.656	0.433	0.224
0.600	estimation	22.432	0.203	0.603	-4.047	2.605	0.331	-0.193	-0.593	0.400
	Std.Error	6.009	0.177	0.300	1.866	0.425	0.225	0.191	1.102	0.324
	t-value	3.733	1.144	2.012	-2.169	6.126	1.469	-1.011	-0.538	1.236
	p-value	0.000	0.254	0.045	0.031	0.000	0.143	0.313	0.591	0.218
0.700	estimation	23.147	0.040	0.589	-3.089	2.527	0.106	-0.002	-0.693	-0.057
	Std.Error	5.470	0.148	0.237	1.830	0.386	0.206	0.168	1.015	0.304
	t-value	4.232	0.273	2.482	-1.688	6.553	0.513	-0.014	-0.682	-0.187
	p-value	0.000	0.785	0.014	0.093	0.000	0.608	0.989	0.496	0.851
0.800	estimation	26.807	0.093	0.761	-2.841	2.456	0.296	-0.106	-1.846	-0.019
	Std.Error	4.404	0.131	0.190	1.378	0.353	0.186	0.144	0.938	0.229
	t-value	6.087	0.705	4.008	-2.062	6.952	1.598	-0.740	-1.969	-0.081
	p-value	0.000	0.481	0.000	0.040	0.000	0.111	0.460	0.050	0.936
0.900	estimation	27.667	-0.079	0.931	-3.410	2.258	0.370	-0.320	-1.586	-0.054
	Std.Error	3.928	0.093	0.142	1.482	0.263	0.143	0.121	0.522	0.114
	t-value	7.043	-0.854	6.556	-2.301	8.601	2.591	-2.652	-3.039	-0.470
	p-value	0.000	0.394	0.000	0.022	0.000	0.010	0.008	0.003	0.639

Table S3. Quantile regression results under autumn.

		(Intercept)	Transparency	DO	PH	COD	TP	TN	Temperature	Conductivity
0.100	estimation	35.974	-0.324	1.603	-11.456	2.526	0.525	-0.266	1.448	-1.121
	Std.Error	16.558	0.329	1.413	8.162	0.806	0.443	0.327	1.424	0.636
	t-value	2.173	-0.983	1.134	-1.404	3.133	1.186	-0.813	1.017	-1.761
	p-value	0.031	0.326	0.258	0.162	0.002	0.237	0.417	0.310	0.079
0.200	estimation	6.309	-0.337	-1.184	9.710	2.705	1.036	-0.999	-0.140	-1.554
	Std.Error	13.393	0.323	1.090	5.317	0.791	0.553	0.429	1.527	0.656
	t-value	0.471	-1.041	-1.087	1.826	3.418	1.874	-2.330	-0.092	-2.368
	p-value	0.638	0.299	0.278	0.069	0.001	0.062	0.021	0.927	0.019
0.300	estimation	18.612	-0.145	-0.391	5.268	3.238	1.091	-1.083	-1.383	-1.756
	Std.Error	12.324	0.281	0.644	5.583	0.696	0.397	0.279	1.458	0.566
	t-value	1.510	-0.517	-0.608	0.944	4.655	2.750	-3.879	-0.948	-3.105
	p-value	0.132	0.606	0.544	0.346	0.000	0.006	0.000	0.344	0.002
0.400	estimation	20.289	-0.070	0.285	3.576	3.230	1.171	-0.980	-1.624	-1.475
	Std.Error	11.968	0.279	0.611	5.117	0.665	0.396	0.263	1.445	0.551
	t-value	1.695	-0.251	0.466	0.699	4.861	2.960	-3.726	-1.123	-2.676
	p-value	0.091	0.802	0.641	0.485	0.000	0.003	0.000	0.262	0.008
0.500	estimation	22.031	-0.189	-0.125	4.645	2.877	1.224	-0.943	-2.034	-1.662
	Std.Error	12.053	0.280	0.813	5.053	0.722	0.433	0.275	1.098	0.590
	t-value	1.828	-0.676	-0.153	0.919	3.983	2.823	-3.429	-1.853	-2.818
	p-value	0.069	0.500	0.878	0.359	0.000	0.005	0.001	0.065	0.005
0.600	estimation	17.190	-0.008	-0.231	4.086	4.151	0.448	-0.705	-1.306	-1.464
	Std.Error	11.902	0.259	0.737	5.112	0.651	0.387	0.222	1.037	0.472
	t-value	1.444	-0.029	-0.314	0.799	6.372	1.156	-3.171	-1.259	-3.101
	p-value	0.150	0.977	0.754	0.425	0.000	0.249	0.002	0.209	0.002
0.700	estimation	13.529	-0.182	-0.402	5.491	4.507	0.169	-0.418	-0.989	-1.622
	Std.Error	10.177	0.213	0.546	4.364	0.597	0.331	0.190	0.799	0.495
	t-value	1.329	-0.856	-0.737	1.258	7.544	0.511	-2.196	-1.238	-3.274
	p-value	0.185	0.393	0.462	0.209	0.000	0.610	0.029	0.217	0.001
0.800	estimation	15.464	-0.182	-0.027	2.039	4.352	0.284	-0.372	-0.314	-1.013
	Std.Error	8.939	0.212	0.486	3.710	0.518	0.318	0.162	0.773	0.465
	t-value	1.730	-0.855	-0.055	0.550	8.394	0.894	-2.291	-0.406	-2.181
	p-value	0.085	0.393	0.956	0.583	0.000	0.372	0.023	0.685	0.030
0.900	estimation	18.560	-0.336	0.166	-0.603	3.999	0.188	-0.229	0.518	-0.970
	Std.Error	5.544	0.175	0.439	1.917	0.434	0.330	0.181	0.682	0.313
	t-value	3.348	-1.918	0.378	-0.314	9.224	0.570	-1.266	0.759	-3.098
	p-value	0.001	0.056	0.706	0.753	0.000	0.569	0.207	0.449	0.002

Table S4. Quantile regression results under winter.

		(Intercept)	Transparency	DO	PH	COD	TP	TN	Temperature	Conductivity
0.100	estimation	-12.446	0.078	-0.637	16.188	3.039	-0.743	0.422	-1.618	-1.546
	Std.Error	14.271	0.230	1.221	6.694	0.944	0.535	0.458	0.405	0.908
	t-value	-0.872	0.341	-0.521	2.418	3.219	-1.388	0.923	-3.992	-1.703
	p-value	0.384	0.734	0.603	0.016	0.001	0.166	0.357	0.000	0.090
0.200	estimation	-10.800	-0.186	-0.139	14.479	1.717	-0.493	0.170	-0.747	-1.165
	Std.Error	10.404	0.201	0.384	3.973	0.601	0.358	0.400	0.335	0.777
	t-value	-1.038	-0.922	-0.363	3.645	2.855	-1.377	0.426	-2.226	-1.500
	p-value	0.300	0.357	0.717	0.000	0.005	0.170	0.671	0.027	0.135
0.300	estimation	-2.142	-0.255	-0.094	13.598	3.122	-0.559	0.095	-0.431	-2.714
	Std.Error	10.801	0.174	0.534	4.688	0.854	0.434	0.419	0.222	0.895
	t-value	-0.198	-1.468	-0.177	2.901	3.654	-1.289	0.226	-1.945	-3.033
	p-value	0.843	0.143	0.860	0.004	0.000	0.198	0.821	0.053	0.003
0.400	estimation	0.362	-0.200	0.092	10.775	3.257	0.104	-0.560	-0.350	-1.822
	Std.Error	10.342	0.178	0.731	4.477	0.749	0.348	0.303	0.262	0.578
	t-value	0.035	-1.125	0.126	2.407	4.349	0.300	-1.847	-1.333	-3.150
	p-value	0.972	0.262	0.900	0.017	0.000	0.764	0.066	0.184	0.002
0.500	estimation	-2.082	-0.343	0.036	12.813	2.913	0.064	-0.443	-0.716	-1.924
	Std.Error	12.389	0.202	1.001	5.467	0.893	0.433	0.363	0.298	0.798
	t-value	-0.168	-1.698	0.036	2.344	3.262	0.148	-1.220	-2.405	-2.412
	p-value	0.867	0.091	0.971	0.020	0.001	0.883	0.223	0.017	0.017
0.600	estimation	-3.101	-0.388	0.150	13.798	3.177	-0.184	-0.334	-0.665	-2.304
	Std.Error	10.005	0.131	0.794	3.767	0.718	0.306	0.259	0.241	0.717
	t-value	-0.310	-2.956	0.189	3.663	4.424	-0.601	-1.289	-2.760	-3.213
	p-value	0.757	0.003	0.850	0.000	0.000	0.548	0.198	0.006	0.001
0.700	estimation	8.410	-0.304	0.120	10.495	2.880	-0.218	0.266	-0.519	-3.075
	Std.Error	10.578	0.123	0.808	3.907	0.814	0.303	0.302	0.248	0.836
	t-value	0.795	-2.480	0.148	2.686	3.539	-0.720	0.881	-2.093	-3.678
	p-value	0.427	0.014	0.882	0.008	0.000	0.472	0.379	0.037	0.000
0.800	estimation	11.157	-0.370	0.483	11.268	2.623	-0.303	0.684	-0.737	-3.882
	Std.Error	10.411	0.153	0.766	4.515	0.802	0.343	0.321	0.242	0.776
	t-value	1.072	-2.429	0.631	2.495	3.269	-0.882	2.134	-3.050	-5.005
	p-value	0.285	0.016	0.529	0.013	0.001	0.379	0.034	0.003	0.000
0.900	estimation	28.683	-0.344	0.128	4.018	2.587	-0.449	0.736	-0.764	-4.133
	Std.Error	10.756	0.194	0.568	4.659	0.706	0.443	0.472	0.208	0.797
	t-value	2.667	-1.769	0.226	0.862	3.663	-1.013	1.560	-3.677	-5.183
	p-value	0.008	0.078	0.821	0.389	0.000	0.312	0.120	0.000	0.000