

## Supplementary Materials

**Table S1.** Estimated and observed water quality data for the model development and validation.

	Sampling date	Observed data			Estimated data		
		TDS	TOC	Chl-a	TDS	TOC	Chl-a
Model development	04/05/2015	93.44	4.88	17.66	97.01	4.84	26.71
	04/05/2015	90.24	4.35	37.38	83.69	4.26	33.55
	04/05/2015	94.08	4.55	22.34	94.33	4.70	16.16
	22/10/2015	103.04	3.60	7.96	100.62	3.94	2.12
	22/10/2015	96.64	3.86	2.72	98.56	3.69	1.11
	22/10/2015	96	3.91	0.10	97.82	3.77	0.44
	09/05/2016	99.84	3.85	0.10	97.29	3.77	0.29
	09/05/2016	81.28	3.98	11.59	88.36	3.78	7.79
	09/05/2016	92.16	3.72	0.1	95.28	4.06	0.96
	15/09/2016	106.5	5.35	0.1	106.72	5.38	1.15
	15/09/2016	105	5.38	2.84	104.11	5.34	1.51
	15/09/2016	100	5.93	2.37	100.89	5.95	0.79
	16/03/2017	95.36	4.26	4.73	88.49	4.21	8.30
	16/03/2017	89.6	4.53	9.60	89.00	4.40	11.88
	16/03/2017	89.6	4.08	5.94	94.27	4.23	4.63
	21/09/2017	110.72	6.03	0.1	108.72	5.76	0.01
	21/09/2017	112	5.32	0.1	110.64	5.40	0.21
	21/09/2017	108.16	5.99	0.1	109.92	6.07	0.35
Model validation	04/05/2015	98.56	4.23	14.19	96.44	4.61	40.80
	22/10/2015	95.36	3.46	0.10	100.71	4.11	0.87
	09/05/2016	89.60	3.96	1.20	94.11	3.76	1.68
	15/09/2016	125.44	5.46	0.10	104.05	5.62	1.80
	16/03/2017	85.12	4.41	7.66	90.02	4.65	12.72
	21/09/2017	111.36	5.59	0.10	112.82	5.78	0.11
	24/05/2018	206.72	6.01	0.82	207.16	6.04	0.84
	24/05/2018	129.92	6.70	0.10	128.60	6.50	0.11
	24/05/2018	124.16	5.51	0.10	124.42	5.71	0.12
	24/05/2018	139.52	6.51	0.95	140.64	6.45	0.76
	06/08/2018	116.10	6.11	4.08	119.33	6.17	4.68
	06/08/2018	147.84	5.35	9.92	142.41	5.21	10.03
	06/08/2018	112.96	5.20	5.24	114.73	5.37	9.16
	06/08/2018	144.64	5.72	7.27	145.04	5.57	7.78
	17/01/2019	77.44	5.19	0.10	68.57	5.27	0.09
	17/01/2019	77.44	5.65	0.10	84.76	5.39	0.08
	17/01/2019	76.16	5.67	0.10	76.15	5.65	0.10
	17/01/2019	76.80	5.53	0.10	77.94	5.72	0.13