

Data used in the analysis

Supplementary Table 1. Salinity data

Date	STN 1	STN 2	STN 3	STN 4	STN 5	STN 6	STN 7
20-01-2020	20	20	20	20	20	20	ND
20-01-2020	20	20	20	20	20	20	ND
21-01-2020	19	20	21	20	19	20	18
21-01-2020	19	20	21	20	19	20	18
22-01-2020	18	18	18	19	20	19	20
22-01-2020	18	18	18	19	20	19	20
23-01-2020	20	20	19	19	19	19	20
23-01-2020	20	20	19	19	19	19	20
24-01-2020	20	20	20	20	20	19	20
24-01-2020	20	20	20	20	20	19	20
25-01-2020	19	20	20	20	20	20	20
25-01-2020	19	20	20	20	20	20	20
26-01-2020	20	20	20	20	20	20	20
26-01-2020	20	20	20	20	20	20	20
27-01-2020	20	19	20	20	19	20	20
27-01-2020	20	19	20	20	19	20	20
31-01-2020	20	20	19	20	20	20	19
31-01-2020	20	20	19	20	20	20	19
03-02-2020	19	20	20	20	20	20	20
03-02-2020	19	20	20	20	20	20	20
06-02-2020	19	19	20	19	19	20	19
06-02-2020	19	19	20	19	19	20	19
15-02-2020	20	20	19	20	20	19	20
15-02-2020	20	20	19	20	20	19	20

Supplementary Table 2. Dissolved oxygen data

Date	STN 1	STN 2	STN 3	STN 4	STN 5	STN 6	STN 7
20-01-2020	2.5	2.6	2.5	2.26	3.3	3.09	ND
20-01-2020	2.3	2.2	2.3	1.9	3.1	3.31	ND
21-01-2020	3.28	2.9	2.91	3.4	2.49	4.79	7.8
21-01-2020	3.44	3.18	2.85	3.64	2.31	4.49	8.2
22-01-2020	3.95	4.08	3.55	3.87	3.61	5.89	9.13
22-01-2020	4.05	3.92	3.49	3.81	3.75	5.31	9.43
23-01-2020	5.17	4.9	4.36	3.8	3.55	3.71	7.29
23-01-2020	5.07	4.7	4.28	4.2	3.49	3.65	7.11
24-01-2020	4.52	4.21	4.18	3.92	4.1	4.17	6.37
24-01-2020	4.44	4.11	4.14	3.76	3.9	4.15	6.43
25-01-2020	4.69	3.7	4.49	4.15	3.91	4.18	4.03
25-01-2020	4.59	3.66	4.47	4.17	4.09	4.14	3.97

26-01-2020	4.61	3.8	4.63	4.17	4.1	4.35	4.87
26-01-2020	4.67	3.88	4.33	4.15	3.9	4.29	4.73
27-01-2020	5.78	5.32	5.37	5.23	4.87	5.3	7.01
27-01-2020	5.76	5.28	5.39	5.19	4.85	5.28	7.17
31-01-2020	5.96	5.59	5.99	5.75	5.82	6.14	7.14
31-01-2020	6.02	5.61	5.91	5.71	5.86	6.1	7.1
03-02-2020	6.1	5.45	6.56	5.83	5.9	7.27	7.63
03-02-2020	6	5.41	6.54	5.87	6.1	7.27	7.61
06-02-2020	6.81	7.23	7.1	7.9	6.18	7.71	8.19
06-02-2020	6.77	7.19	7.3	7.92	6.14	7.67	8.17
15-02-2020	ND	ND	ND	ND	ND	ND	ND
15-02-2020	ND	ND	ND	ND	ND	ND	ND

Supplementary Table 3. pH data

Date	STN 1	STN 2	STN 3	STN 4	STN 5	STN 6	STN 7
20-01-2020	8.3	7.1	7.5	7.6	7.6	7.6	ND
20-01-2020	8.3	7.1	7.5	7.6	7.6	7.6	ND
21-01-2020	7.7	7.6	7.5	7.4	7.4	7.4	7.4
21-01-2020	7.7	7.6	7.5	7.4	7.4	7.4	7.4
22-01-2020	7.6	7.4	7.3	7.3	7.4	7.4	7.6
22-01-2020	7.6	7.4	7.3	7.3	7.4	7.4	7.6
23-01-2020	7.6	7.6	7.5	7.5	7.5	7.6	7.5
23-01-2020	7.6	7.6	7.5	7.5	7.5	7.6	7.5
24-01-2020	9.7	9.5	8.9	9.1	8.9	8.8	9.1
24-01-2020	9.7	9.5	8.9	9.1	8.9	8.8	9.1
25-01-2020	9	9	8.8	8.8	8.8	8.9	8.9
25-01-2020	9	9	8.8	8.8	8.8	8.9	8.9
26-01-2020	9	9.1	9	9.1	9.1	9.1	9.1
26-01-2020	9	9.1	9	9.1	9.1	9.1	9.1
27-01-2020	9.1	9.1	9	9	9.2	9	9.1
27-01-2020	9.1	9.1	9	9	9.2	9	9.1
31-01-2020	9.1	9.2	9.2	9.1	9.1	9.2	9.2
31-01-2020	9.1	9.2	9.2	9.1	9.1	9.2	9.2
03-02-2020	9.2	9	9.1	9.2	9.1	9.1	9
03-02-2020	9.2	9	9.1	9.2	9.1	9.1	9
06-02-2020	9.2	9.2	9	9	9.1	9.1	9.1
06-02-2020	9.2	9.2	9	9	9.1	9.1	9.1
15-02-2020	9.1	9	9	9.2	9	9	9.2
15-02-2020	9.1	9	9	9.2	9	9	9.2

Supplementary Table 4. Database obtained from the TURBAQUA application. (Actual names of the citizen scientists involved in the program has been replaced with 'CS' due to the privacy policy).

	Citizen scientist name	Boat level	Sea level	secchi depth	Water colour	Latitude	Longitude	Date
1	CS	1.72	2.49	0.77	17	9.9299185	76.3205819	15-02-2020 17.25
2	CS	1.78	2.49	0.71	17	9.9338385	76.3187577	15-02-2020 17.23
3	CS	1.52	2.17	0.65	16	9.9351897	76.3150063	15-02-2020 17.17
4	CS	2.25	3.25	1	15	9.9429382	76.304219	15-02-2020 17.11
5	CS	1.82	2.6	0.78	15	9.9356939	76.3152316	15-02-2020 17.07
6	CS	1.75	2.36	0.61	17	9.9366462	76.3108651	15-02-2020 17.05
7	CS	2.19	2.92	0.73	16	9.9370307	76.3161473	15-02-2020 17.01
8	CS	1.95	2.65	0.7	17	9.9275434	76.3177123	15-02-2020 11.22
9	CS	1.71	3.6	1.89	17	9.9351064	76.3149295	15-02-2020 11.08
10	CS	2.58	3.62	1.04	15	9.9440101	76.3043672	15-02-2020 10.54
11	CS	2.05	3.07	1.02	15	9.9365099	76.3118044	15-02-2020 10.52
12	CS	1.97	2.42	0.45	17	9.9365099	76.3118044	15-02-2020 10.39
13	CS	2.42	3.43	1.01	16	9.9354901	76.314788	15-02-2020 10.27
14	CS	2.1	2.75	0.65	17	9.9361539	76.3114425	15-02-2020 10.25
15	CS	1.5	2.31	0.81	18	9.9361157	76.3270038	06-02-2020 10.48
16	CS	1.71	2.34	0.63	17	9.9304168	76.3128902	06-02-2020 10.48
17	CS	1.7	2.5	0.8	16	9.9351017	76.314503	06-02-2020 10.28
18	CS	2.35	3.12	0.77	15	9.9465058	76.3064828	06-02-2020 10.16
19	CS	1.96	2.7	0.74	15	9.9356527	76.3151741	06-02-2020 10.06
20	CS	1.9	2.71	0.81	16	9.9361539	76.3114425	06-02-2020 10.05
21	CS	2.25	3.2	0.95	15	9.9361539	76.3114425	06-02-2020 9.58
22	CS	2.76	2.32	-0.44	19	9.935393	76.3149566	03-02-2020 13.09
23	CS	2.12	2.57	0.45	18	9.935393	76.3149566	03-02-2020 13.03
24	CS	1.8	2.44	0.64	18	9.935393	76.3149566	03-02-2020 12.54
25	CS	2.65	3.47	0.82	16	9.9466613	76.306249	03-02-2020 12.41
26	CS	2.05	2.35	0.3	20	9.9361539	76.3114425	03-02-2020 12.25
27	CS	2.46	3.3	0.84	16	9.9357122	76.3151429	03-02-2020 12.14

28	CS	1.74	2.36	0.62	17	9.9333843	76.3186806	31-01-2020 15.46
29	CS	1.94	2.62	0.68	16	9.9305641	76.3187481	31-01-2020 15.41
30	CS	1.53	2.34	0.81	16	9.9353623	76.3151678	31-01-2020 15.29
31	CS	2.3	3.16	0.86	16	9.9456484	76.305445	31-01-2020 15.18
32	CS	1.95	2.72	0.77	16	9.9356035	76.3152228	31-01-2020 15.09
33	CS	1.76	2.35	0.59	18	9.9365439	76.3109018	31-01-2020 15.04
34	CS	2.27	3.27	1	15	9.9352538	76.314577	31-01-2020 14.55
35	CS	1.78	2.33	0.55	19	9.9361157	76.3270038	31-01-2020 11.43
36	CS	2	2.53	0.53	17	9.9335909	76.3237873	31-01-2020 11.32
37	CS	1.5	2.54	1.04	16	9.934883	76.3154663	31-01-2020 11.16
38	CS	2.56	3.2	0.64	16	9.9467059	76.3062717	31-01-2020 10.59
39	CS	2.12	2.5	0.38	16	9.9358	76.3151328	31-01-2020 10.49
40	CS	2.28	2.61	0.33	17	9.9365439	76.3109018	31-01-2020 10.42
41	CS	2.51	3.46	0.95	16	9.9354574	76.3148378	31-01-2020 10.32
42	CS	1.86	2.43	0.57	17	9.93564	76.3237469	27-01-2020 11.10
43	CS	1.73	2.3	0.57	17	9.9299237	76.3205791	27-01-2020 11.09
44	CS	1.61	2.4	0.79	16	9.935022	76.3143089	27-01-2020 10.56
45	CS	2.5	3.12	0.62	17	9.9465905	76.3065622	27-01-2020 10.47
46	CS	1.96	2.52	0.56	17	9.9346738	76.315895	27-01-2020 10.39
47	CS	1.85	2.29	0.44	19	9.9365249	76.3121663	27-01-2020 10.35
48	CS	2.41	3.15	0.74	16	9.9353706	76.3147498	27-01-2020 10.28
49	CS	1.83	2.45	0.62	18	9.9307461	76.3208519	26-01-2020 10.53
50	CS	1.75	3.33	1.58	17	9.9338599	76.318728	26-01-2020 10.47
51	CS	1.69	2.29	0.6	16	9.9347615	76.3150825	26-01-2020 10.37
52	CS	1.8	2.39	0.59	18	9.9365249	76.3121663	26-01-2020 10.37
53	CS	2.37	2.85	0.48	17	9.9465415	76.3063755	26-01-2020 10.29
54	CS	1.8	2.43	0.63	19	9.9290257	76.3149521	26-01-2020 10.16
55	CS	2.25	3.15	0.9	16	9.9356938	76.3151057	26-01-2020 10.11
56	CS	1.85	2.4	0.55	17	9.9361157	76.3270038	25-01-2020 9.13

57	CS	2.94	2.7	-0.24	17	9.9305238	76.3186539	25-01-2020 9.02
58	CS	1.61	2.24	0.63	17	9.9354388	76.3149904	25-01-2020 8.46
59	CS	2.34	2.99	0.65	17	9.9457336	76.3055497	25-01-2020 8.29
60	CS	1.96	2.57	0.61	18	9.9357008	76.3151684	25-01-2020 8.16
61	CS	1.81	2.49	0.68	17	9.9346738	76.315895	25-01-2020 8.09
62	CS	2.23	2.91	0.68	17	9.9356271	76.3150218	25-01-2020 8.00
63	CS	1.16	1.883	0.723	16	9.9361157	76.3270038	24-01-2020 9.10
64	CS	1.95	2.542	0.592	16	9.9303945	76.3191716	24-01-2020 8.58
65	CS	1.57	2.325	0.755	16	9.9343139	76.3159604	24-01-2020 8.42
66	CS	2.34	2.952	0.612	15	9.9466491	76.3065011	24-01-2020 8.28
67	CS	2.03	2.582	0.552	16	9.935739	76.3150116	24-01-2020 8.14
68	CS	1.8	2.415	0.615	16	9.9346738	76.315895	24-01-2020 8.05
69	CS	2.2	2.745	0.545	16	9.9352759	76.3146239	24-01-2020 7.53
70	CS	1.04	1.95	0.91	18	9.9361157	76.3270038	23-01-2020 8.01
71	CS	1.83	2.53	0.7	17	9.9338599	76.318728	23-01-2020 7.53
72	CS	1.44	2.12	0.68	17	9.9356235	76.3151367	23-01-2020 7.40
73	CS	2.27	3	0.73	17	9.9465242	76.3065022	23-01-2020 7.29
74	CS	1.92	2.5	0.58	17	9.9357212	76.3151675	23-01-2020 7.16
75	CS	1.68	2.02	0.34	17	9.9365399	76.3125283	23-01-2020 7.09
76	CS	2.11	2.86	0.75	17	9.9350881	76.3143237	23-01-2020 6.58
77	CS	1.67	2.18	0.51	19	9.9361007	76.3266419	22-01-2020 15.11
78	CS	2.05	2.5	0.45	19	9.9306026	76.318558	22-01-2020 14.58
79	CS	1.8	2.38	0.58	19	9.9353454	76.3153964	22-01-2020 14.44
80	CS	2.5	3.33	0.83	19	9.9465161	76.3064761	22-01-2020 14.23
81	CS	2.2	2.6	0.4	19	9.9346738	76.315895	22-01-2020 14.08
82	CS	2.3	2.39	0.09	20	9.9290257	76.3149521	22-01-2020 14.02
83	CS	2.43	3.12	0.69	19	9.9356846	76.3151351	22-01-2020 13.51
84	CS	1.94	2.344	0.404	20	9.934962	76.3156129	21-01-2020 15.38
85	CS	1.8	2.26	0.46	20	9.9299237	76.3205791	21-01-2020 15.05

86	CS	2.15	2.55	0.4	19	9.9338599	76.318728	21-01-2020 14.57
87	CS	2.35	2.62	0.27	20	9.9358318	76.3151005	21-01-2020 14.29
88	CS	2.19	2.53	0.34	20	9.9173445	76.3172769	21-01-2020 14.21
89	CS	2.58	3.23	0.65	17	9.9353114	76.3145814	21-01-2020 14.07
90	CS	1.91	2.42	0.51	21	9.9361007	76.3266419	20-01-2020 15.22
91	CS	2.26	2.72	0.46	20	9.9297504	76.3227674	20-01-2020 15.03
92	CS	1.9	2.44	0.54	20	9.9353093	76.3152339	20-01-2020 14.30
93	CS	2.35	2.82	0.47	20	9.9358703	76.3149041	20-01-2020 14.16
94	CS	2.14	2.59	0.45	20	9.9364949	76.3114425	20-01-2020 14.03
95	CS	2.49	3.27	0.78	18	9.9350831	76.3142854	20-01-2020 13.52
96	CS	2.15	2.315	0.165	17	9.9365439	76.3109018	18-01-2020 15.13