

Table S1. Values of abundance of *Physella acuta* and physico-chemical parameters recorded at each site.

Site	Abundance (ind.m ⁻²)	pH	Temperature (°C)	Electrical Cond. (µs.cm ⁻¹)	O ₂ (mg.L ⁻¹)	NO ₃ (mg.L ⁻¹)	SO ₄ (mg.L ⁻¹)	PO ₄ (mg.L ⁻¹)	BDO ₅ (mg.L ⁻¹)	Flow velocity (cm.S ⁻¹)	Depth (cm)	Sediment
S1	25	7.05	26.3	725	5.8	4.34	189	1.705	7.25	0	10	sand
S2	0	6	25.7	2700	1.01	102.95	279	2.79	29.55	5	40	sand
S3	0	6.85	28	1970	3.15	65.19	495	2.75	19.7	16	30	slime
S4	8	7.42	27.3	1835	6.22	7.34	345	0.31	7.9	18	45	mud
S5	10	7.85	22.7	1450	6.87	9.35	379	1.095	6.93	20	50	mud
S6	0	7.75	23.5	1700	8.57	2.9	227	0.023	0.49	51	15	sand
S7	8	7.6	26	880	5.21	10.57	58	0.105	7.95	22	35	sand
S8	30	8.5	21.5	589	7.4	2.95	81	0.029	2.45	24	45	sand
S9	30	7.8	23.3	795	7.8	3.34	173	0.105	5.24	26	35	mud
S10	0	7.9	23	577	6.81	2.93	79	0.039	6.55	50	25	mud
S11	53	7.6	23.1	739	6.85	1.29	52	0.015	5.5	28	30	sand
S12	35	8.1	22.4	953	5.75	1.66	55	0.026	6.35	30	45	sand
S13	0	7.3	19.7	1990	7.12	3.31	67	0.011	5.05	32	25	slime
S14	0	7.3	23	1863	6.7	2.78	59	0.019	4.15	34	20	mud
S15	0	8.3	24	2230	2.92	51.75	339	1.985	29.25	55	20	mud
S16	5	6.9	24	1870	5.15	2.79	55	0.016	7.7	36	45	mud
S17	45	7.2	20	387	9.6	1.34	40	0.012	4.8	38	45	sand
S18	95	7.1	19	421	7.15	1.35	51	0.015	1.93	40	40	sand
S19	23	7.6	25	1254	9	9.83	90	0.4	5.7	42	40	slime
S20	35	8	20	450	7.5	0.03	40	0.005	2.4	1	35	mud
S21	43	7.2	24	213	8.12	4.34	35	0.021	6.2	44	50	mud
S22	0	6.7	27	2100	4.15	6.57	140	1.19	7.55	5	5	mud
S23	48	8.2	23	530	6.7	0.4	40	0.4	2.5	3	25	sand
S24	5	8.2	25	912	9	21.4	70	0.3	9	46	35	sand
S25	20	7	24	900	5.3	5.6	64	0.02	7.8	48	40	slime
S26	58	7.5	20	779	7.5	3.4	62	0.022	6.14	49	45	mud
S27	43	6.75	22	1011	5.01	5.95	129	1.105	5.75	15	35	mud
S28	0	7.4	24	789	6	19.6	35	0.78	9.3	56	65	mud
S29	33	8	24	1127	10	40	403	2.04	12.5	17	45	sand
S30	0	8.1	24	534	12	2.4	53	0.2	6	58	30	sand
S31	0	6.5	26	2037	1.5	16.4	185	4.31	15.3	19	25	slime

S32	0	6.5	25	1990	3.15	30.55	130	2.75	20.4	21	20	mud
S33	3	8.2	24	1097	7	31	70	1.3	17.5	23	40	mud
S34	0	7.4	25	946	9	10.23	65	0.04	8	60	30	mud
S35	23	7.3	20	894	6	20.5	90	0.34	10	25	25	mud
S36	40	8.3	25	1178	5	53.62	179	1.37	11	27	35	mud
S37	38	7.5	25	1245	8	18.24	50	1.4	13	29	25	mud
S38	0	7.6	25	910	8	8.22	96	0.4	10	62	15	mud
S39	73	7	19.5	570	7.3	10	45	0.042	5	31	45	mud
S40	15	6.75	26	1540	5.55	30.3	125	2.21	13.48	33	30	mud
S41	0	7.6	25	975	6	32.1	261	2.82	11.21	64	40	mud
S42	8	7	24	832	9	5.4	34	0.04	8	5	40	mud
S43	0	7.6	24	912	10	2	37	0.027	6	66	20	sand
S44	10	7	23	1230	5	14.77	90	3.04	15	35	35	sand
S45	0	6.5	24	1370	2.15	40	89	2.4	32	37	15	sand
S46	43	7.2	18	370	9.13	0.08	50	0.02	1.05	39	40	sand
S47	0	8.2	18	3340	6.5	8.65	48	3.12	11.4	6	25	sand
S48	0	8.8	23	2240	7.12	13.2	68	0.03	5.02	41	30	sand
S49	13	7.6	25	1100	8.24	5.5	40	1.22	7.4	43	40	sand
S50	0	8.1	22	870	5.5	6	64	0.022	8.5	68	5	sand
S51	38	7.1	25	430	7.13	6	61	0.022	8.5	45	25	mud
S52	30	7.5	26	1220	8.25	5.6	49	0.04	7.5	47	40	mud
S53	0	7.5	26	1320	5.6	6	69	1.23	8.6	49	25	sand
S54	5	7.5	25	1400	7.14	6	41	0.023	9.5	17	40	sand
S55	0	8.0	28.7	1143	8.48	1.53	62	1.022	10.5	19	70	sand
S56	5	7.7	27.2	1018	2.9	0.61	89	0.05	12.2	21	40	sand
S57	23	7.7	26.2	1032	4.46	1.15	50	1.24	13.9	23	30	mud
S58	10	7.7	26.4	926	4.71	1.05	50	0.024	15.6	25	25	mud
S59	3	8.15	27.2	1138	3.42	7.14	48	3.63	17.3	15	45	sand
S60	33	8.0	25.1	1184	3.55	7.4	68	1.17	5.02	9	40	sand
S61	103	7.5	16.9	250	7	1.15	40	0.63	1.1	0	35	sand
S62	63	8.25	17.5	600	7.2	1.05	64	0.71	6.78	27	40	sand
S63	0	7.8	18.8	222	8	7.14	61	0.4	8.16	70	20	mud
S64	68	7.5	19.2	375	6.5	9.5	49	0.84	6.54	29	40	mud
S65	33	7.8	24	700	7.9	2.65	69	0.85	8.92	10	40	mud
S66	3	7.8	26	679	8.1	4.5	41	0.18	9.3	5	30	slime
S67	63	7.7	19	280	8	4.7	65	0.35	6.68	31	45	sand
S68	0	8.5	29.4	1520	7.1	6	62	0.52	6.06	33	10	slime
S69	0	8.4	29.1	1460	6.3	7.025	48	0.69	12	6	70	slime

S70	0	8.1	29	690	8.1	8.05	70	0.86	13.82	35	70	sand
S71	0	8.0	25.1	1184	3.55	7.4	68	1.17	5.02	14	70	slime
S72	0	7.5	25	1245	8	18.24	50	1.4	13	37	90	slime
S73	0	7.2	20	387	9.6	1.34	40	0.012	4.8	39	80	sand
S74	0	7.1	25	430	7.13	6	61	0.022	8.5	41	75	slime