

Table S2. Stream water quality parameters measured at each stream during April 2008. Inorganic mass (ash mass) on stream rocks was averaged from 5 randomly selected cobbles and reported per cm².

Stream	pH	Water Temperature (°C)	Stream Depth (m)	Stream Width (m)	Stream Discharge (l s ⁻¹)	Conductivity (µS cm ⁻¹)	Inorganic mass (mg cm ⁻²)	Aluminium (mg l ⁻¹)†	Zinc (mg l ⁻¹) †	Dissolved Reactive Phosphorus (µg l ⁻¹) †	Dissolved Inorganic Nitrogen (µg l ⁻¹) †
OB	2.8	16.6	0.18	1.62	36.6	1399	0.46	56	0.64	339.6	1831
PT	2.8	15.1	0.12	0.32	5.1	1174	0.12	34	0.40	45.5	984
SWA	2.8	11.1	0.17	4.31	54.2	948	0.68	14	0.52	75.5	112
PO	2.9	16.7	0.11	0.51	7.4	1079	0.09	46	0.44	58.4	1124
WE	3.3	9.9	0.24	1.93	55.2	849	2.73	8.3	0.89	5.5	189
WM	3.9	8.6	0.14	1.08	15.4	82	0.49	0.4	0.01	3.1	11
GA	4.0	10.2	0.21	2.11	61.4	449	0.85	2.3	0.15	3.3	1872
BF	4.1	9.0	0.21	3.87	66.8	62	0.14	0.9	0.04	5.5	40
RU	4.5	7.8	0.19	3.11	41.1	27	0.05	0.1	0.1	2.6	40
DU	4.5	9.1	0.10	1.12	11.3	115	0.72	0.9	0.0	6.7	17
DR	5.0	8.1	0.08	0.41	6.9	22	0.05	0.1	0.0	7.9	40
NG	5.7	9.1	1.60*	30.0*	8000*	133	0.66	0.0	0.1	2.0	134
TW	6.7	9.6	0.15	1.21	16.7	103	0.05	0.1	0.0	2.0	25
BR	7.1	10.6	0.12	1.43	11.4	280	0.08	0.0	0.0	4.9	51
MU	7.1	9.5	0.26	2.89	88.2	77	0.05	0.1	0.0	9.0	12
LA	7.4	9.6	0.16	2.76	51.4	101	0.05	0.1	0.0	24.7	14
NMC	8.3	16.8	0.24	4.10	34.2	608	0.15	0	0	3.5	88

† Concentrations within filtered stream water. Dissolved inorganic nitrogen is the sum of concentrations of nitrate/nitrite nitrogen and ammoniacal nitrogen.

*estimate