

Table S1: Biotic and abiotic soil parameters. Abbreviations: Code: site, status, core number and depth specific code; Alder: alder swamp; Coast: coastal mire; Perco: percolation mire; dry: drained; wet: rewetted; 05, 15, 25: sampling depth in cm; moisture: gravimetric soil water content in %; DNA_DW: extracted μg DNA per gram dry weight; DOM: dissolved organic matter in $\mu\text{g C/g}$ dry soil; Bio: biopolymers in $\mu\text{g C/g}$ dry soil; hCOM: high molecular carbon organic matter in $\mu\text{g C/g}$ dry soil; lCOM: low molecular carbon organic matter in $\mu\text{g C/g}$ dry soil; N: concentration of nitrogen in %; C: concentration of carbon in %; C_N: C/N ratio; S: concentration of sulfur in %, pHCaCl2: pH from CaCl_2 soil extracts; Sal: salinity; mcrA_DW: *mcrA* gene abundance per gram dry soil; Std_dev: Standard deviation of four technical replicate qPCR measurements.

Code	moisture	DNA_DW	DOM	Bio	hCOM	lCOM	N	C	C_N	S	pHCaCl2	Sal	mcrA_DW	Std_dev
Alder_dry_1_05	55.4	32.8	522	35	233	135	1.27	16.4	12.9	0.29	4.20	0.08	1.21E+06	\pm 6.66E+04
Alder_dry_1_15	48.8	21.2	291	25	138	85	0.92	12.9	14.0	0.24	4.33	0.08	1.24E+06	\pm 9.92E+04
Alder_dry_1_25	47.8	33.4	371	32	195	79	1.98	29.5	14.9	0.55	4.72	0.08	6.67E+05	\pm 7.08E+04
Alder_dry_2_05	42.0	36.9	396	24	215	75	1.27	16.4	12.9	0.29	4.20	0.08	7.09E+05	\pm 5.13E+03
Alder_dry_2_15	36.0	25.4	368	21	162	68	0.92	12.9	14.0	0.24	4.33	0.08	5.41E+05	\pm 1.31E+03
Alder_dry_2_25	37.2	27.7	535	41	247	148	1.98	29.5	14.9	0.55	4.72	0.08	6.29E+05	\pm 0.00E+00
Alder_dry_3_05	45.9	21.3	408	25	140	172	1.27	16.4	12.9	0.29	4.20	0.08	6.56E+05	\pm 4.92E+04
Alder_dry_3_15	45.0	16.6	180	14	81	47	0.92	12.9	14.0	0.24	4.33	0.08	6.76E+05	\pm 5.12E+04
Alder_dry_3_25	58.3	51.1	367	32	177	77	1.98	29.5	14.9	0.55	4.72	0.08	1.30E+06	\pm 1.27E+05
Alder_wet_1_05	89.7	167	1289	250	539	335	2.77	34.0	12.3	0.55	5.07	0.33	7.59E+07	\pm 6.28E+06
Alder_wet_1_15	76.1	68.2	433	59	195	103	2.77	34.0	12.3	0.55	5.07	0.33	1.16E+07	\pm 2.54E+03
Alder_wet_1_25	73.5	32.9	795	222	339	133	2.71	39.0	14.4	0.65	5.09	0.33	3.02E+06	\pm 4.30E+05
Alder_wet_2_05	79.1	89.6	844	64	274	187	2.77	34.0	12.3	0.55	5.07	0.33	1.53E+07	\pm 7.85E+05
Alder_wet_2_15	75.1	66.2	767	100	266	400	2.77	34.0	12.3	0.55	5.07	0.33	1.69E+06	\pm 8.75E+04
Alder_wet_2_25	81.5	63.3	761	109	381	138	2.71	39.0	14.4	0.65	5.09	0.33	1.44E+06	\pm 2.81E+05
Alder_wet_3_05	78.0	167.5	1025	178	555	138	2.77	34.0	12.3	0.55	5.07	0.33	6.18E+07	\pm 5.51E+06
Alder_wet_3_15	74.9	78.4	630	96	302	141	2.77	34.0	12.3	0.55	5.07	0.33	1.02E+07	\pm 5.09E+05
Alder_wet_3_25	80.3	52.1	791	91	350	171	2.71	39.0	14.4	0.65	5.09	0.33	6.68E+06	\pm 1.68E+05
Coast_dry_1_05	44.2	19.2	422	54	182	91	1.59	21.7	13.6	0.59	3.85	1.32	4.29E+05	\pm 3.50E+04
Coast_dry_1_15	62.4	30	470	58	218	100	1.17	15.1	12.9	0.59	4.05	1.32	4.20E+05	\pm 5.87E+04
Coast_dry_1_25	91.0	74.9	1243	193	400	360	0.67	8.6	12.8	0.26	4.04	1.32	9.56E+05	\pm 2.59E+05
Coast_dry_2_05	41.2	30.2	485	47	204	95	1.59	21.7	13.6	0.59	3.85	1.32	2.45E+05	\pm 4.45E+04
Coast_dry_2_25	43.4	8.9	211	24	68	68	0.67	8.6	12.8	0.26	4.04	1.32	1.55E+05	\pm 7.36E+03
Coast_dry_3_05	41.6	27.4	299	34	111	78	1.59	21.7	13.6	0.59	3.85	1.32	2.36E+05	\pm 2.73E+04
Coast_dry_3_15	40.7	24.3	247	32	96	52	1.17	15.1	12.9	0.59	4.05	1.32	1.34E+05	\pm 3.57E+04
Coast_dry_3_25	47.7	14.6	207	28	70	48	0.67	8.6	12.8	0.26	4.04	1.32	2.34E+05	\pm 5.44E+04
Coast_wet_1_05	43.7	32.4	330	40	121	95	1.76	31.4	17.8	0.69	4.70	5.20	1.94E+06	\pm 1.79E+05
Coast_wet_1_15	37.4	23.5	430	58	218	65	0.78	15.0	19.2	0.28	4.40	5.20	8.15E+05	\pm 3.27E+04
Coast_wet_1_25	61.2	46.7	698	54	332	72	0.68	12.8	19.0	0.25	6.05	5.20	7.43E+05	\pm 5.32E+04
Coast_wet_2_05	60.3	42.7	535	61	198	152	1.76	31.4	17.8	0.69	4.70	5.20	7.57E+06	\pm 1.06E+06
Coast_wet_2_15	46.4	32.3	448	38	187	117	0.78	15.0	19.2	0.28	4.40	5.20	6.83E+05	\pm 3.09E+04
Coast_wet_2_25	67.0	47.9	1050	73	393	393	0.68	12.8	19.0	0.25	6.05	5.20	9.91E+05	\pm 1.86E+05
Coast_wet_3_05	54.5	54.1	550	44	223	114	1.76	31.4	17.8	0.69	4.70	5.20	2.20E+06	\pm 1.80E+05
Coast_wet_3_15	45.7	36.7	418	63	223	78	0.78	15.0	19.2	0.28	4.40	5.20	5.95E+05	\pm 1.06E+05
Coast_wet_3_25	68.1	42.8	763	77	368	172	0.68	12.8	19.0	0.25	6.05	5.20	5.97E+05	\pm 6.05E+04
Perco_dry_1_05	62.4	95.9	825	88	477	173	3.41	37.3	10.9	0.49	4.98	0.11	1.40E+06	\pm 4.31E+05
Perco_dry_1_15	73.6	110.5	1389	197	831	195	3.41	37.3	10.9	0.49	5.18	0.11	2.59E+06	\pm 2.48E+05
Perco_dry_1_25	79.0	103.1	1024	175	606	229	3.07	43.6	14.2	0.50	5.20	0.11	7.22E+06	\pm 6.17E+05
Perco_dry_2_05	71.4	102.3	938	91	486	97	3.41	37.3	10.9	0.49	4.98	0.11	1.18E+06	\pm 2.06E+05

Perco_dry_2_15	75.4	117.9	944	113	530	124	3.41	37.3	10.9	0.49	5.18	0.11	2.08E+06	± 9.49E+04
Perco_dry_2_25	78.4	73.7	810	97	419	105	3.07	43.6	14.2	0.50	5.20	0.11	2.11E+06	± 2.99E+06
Perco_dry_3_05	71.6	125.6	817	86	441	118	3.41	37.3	10.9	0.49	4.98	0.11	2.33E+06	± 6.58E+05
Perco_dry_3_15	76.6	181.4	1139	147	621	165	3.41	37.3	10.9	0.49	5.18	0.11	1.06E+07	± 7.81E+04
Perco_dry_3_25	79.8	117.1	1143	132	647	156	3.07	43.6	14.2	0.50	5.20	0.11	9.50E+06	± 2.18E+06
Perco_wet_1_05	83.5	195.4	1195	103	79	339	2.64	31.1	11.8	0.86	5.36	0.49	4.06E+07	± 2.06E+06
Perco_wet_1_15	76.7	102.9	739	86	83	154	2.64	31.1	11.8	0.86	5.36	0.49	5.45E+07	± 6.35E+06
Perco_wet_1_25	79.6	51.5	526	91	48	113	2.66	46.4	17.4	1.01	5.39	0.49	1.81E+07	± 3.02E+06
Perco_wet_2_05	82.2	171.5	980	136	106	127	2.64	31.1	11.8	0.86	5.36	0.49	1.60E+07	± 1.33E+06
Perco_wet_2_15	69.4	61.8	672	58	63	227	2.64	31.1	11.8	0.86	5.36	0.49	2.25E+07	± 1.22E+06
Perco_wet_2_25	71.7	41.3	481	47	192	103	2.66	46.4	17.4	1.01	5.39	0.49	3.90E+07	± 6.14E+05
Perco_wet_3_05	76.3	137.4	1682	104	782	351	2.64	31.1	11.8	0.86	5.36	0.49	4.92E+07	± 8.11E+06
Perco_wet_3_15	71.0	81.3	1192	117	538	290	2.64	31.1	11.8	0.86	5.36	0.49	4.87E+07	± 1.27E+07
Perco_wet_3_25	68.3	24.6	474	54	194	85	2.66	46.4	17.4	1.01	5.39	0.49	1.82E+07	± 1.83E+06

