

Supplementary Material

Table S1. Shallow Groundwater Chemistry Results

Well ID	Date of Sampling	A ₂₅₄	S ₂₇₅₋₂₉₅	S _R	E ₂ :E ₃	DOC (mg L ⁻¹)	TDN (mg L ⁻¹)	C/N	SUVA (L mgC ⁻¹ m ⁻¹)	NH ₄ -N (µg L ⁻¹)	NO ₂ -N (µg L ⁻¹)	NO ₃ -N (µg L ⁻¹)	PO ₄ -P (µg L ⁻¹)	Cl (mg L ⁻¹)	SO ₄ (mg L ⁻¹)	Na (mg L ⁻¹)	K (mg L ⁻¹)	Ca (mg L ⁻¹)	Mg (mg L ⁻¹)	Mn (mg L ⁻¹)	Fe (mg L ⁻¹)	Cu (mg L ⁻¹)	Zn (mg L ⁻¹)	TDP (mg L ⁻¹)	S (mg L ⁻¹)
Unburned (Control) Section																									
U1	02-May-19	3.135	0.014	0.882	4.08	73.5	2.01	36.5	4.27	25.9	3.23	95.4	164	6.33	0.86	2.92	0.674	26.3	3.99	0.043	0.980	0.037	0.201	0.156	2.29
U1	28-May-19	2.659	0.014	0.707	5.27	65.7	2.23	29.4	4.05	256	<0.5	27.0	136	3.66	<0.37	1.70	0.979	21.6	3.72	0.112	0.454	0.055	0.263	0.112	1.69
U1	11-Jul-19	2.590	0.014	0.751	5.47	62.8	2.65	23.7	4.12	302	<0.5	12.2	149	3.41	<0.37	1.95	0.991	19.3	3.34	0.093	0.657	<0.02	0.058	0.122	1.83
U1	10-Aug-19	2.609	0.015	0.752	5.66	64.6	2.07	31.3	4.04	212	<0.5	7.04	190	4.06	<0.37	1.52	0.634	20.7	3.95	0.086	0.625	<0.02	0.029	0.207	1.69
U2	02-May-19	2.519	0.015	0.745	5.63	70.0	2.05	34.1	3.60	399	<0.5	69.6	180	3.50	<0.37	3.18	0.477	28.1	4.02	0.235	0.135	0.164	0.274	<0.015	4.56
U2	28-May-19	2.535	0.015	0.707	5.84	63.4	1.97	32.3	4.00	300	<0.5	18.2	128	2.49	<0.37	1.23	0.701	22.9	3.91	0.209	0.315	0.072	0.160	<0.015	3.75
U2	11-Jul-19	2.588	0.015	0.707	5.79	63.3	2.27	27.9	4.09	457	<0.5	9.82	128	2.85	<0.37	1.39	0.741	19.3	3.67	0.068	0.233	<0.02	0.050	0.127	3.36
U2	10-Aug-19	2.528	0.015	0.729	5.80	61.2	1.81	33.9	4.13	326	<0.5	5.78	105	2.58	<0.37	1.29	0.596	21.2	4.02	0.264	0.292	<0.02	0.022	0.080	1.99
U3	02-May-19	2.737	0.015	0.836	5.47	71.1	2.10	33.9	3.85	56.3	<0.5	34.5	33.5	5.28	<0.37	4.68	0.175	32.4	4.26	0.090	0.269	0.172	0.447	<0.015	5.09
U3	28-May-19	2.672	0.015	0.752	5.63	67.3	2.49	27.0	3.97	121	<0.5	34.8	151	2.90	<0.37	1.27	0.454	27.4	4.29	0.112	0.366	0.074	0.119	0.113	4.08
U3	11-Jul-19	2.763	0.014	0.726	5.65	68.4	2.37	28.8	4.04	510	<0.5	8.22	147	2.71	<0.37	1.37	0.463	24.2	4.45	0.106	0.311	<0.02	0.048	0.178	4.00
U3	10-Aug-19	3.322	0.015	0.740	5.53	77.6	2.24	34.6	4.28	270	<0.5	8.46	79.1	3.31	<0.37	1.40	0.470	26.1	4.58	0.115	0.584	<0.02	0.029	0.086	4.23
Burned (Treatment) Section																									
B1	02-May-19	3.279	0.014	1.023	3.69	73.2	1.47	49.9	4.48	33.6	0.82	131	67.1	9.54	1.94	4.76	0.298	19.5	2.27	0.035	0.825	0.089	0.535	<0.015	2.28
B1	28-May-19	1.722	0.016	0.799	6.03	47.8	2.19	21.8	3.60	292	2.30	154	93.9	3.64	<0.37	2.14	1.37	26.7	4.52	0.715	0.397	0.128	0.137	0.114	2.49
B1	11-Jul-19	1.672	0.016	0.780	6.15	48.1	2.16	22.3	3.48	647	<0.5	20.0	161	2.43	<0.37	1.58	0.957	29.4	4.39	0.377	0.299	<0.02	0.026	0.172	2.01
B1	10-Aug-19	1.841	0.016	0.757	6.16	49.1	1.52	32.3	3.75	220	<0.5	10.4	82.1	4.10	<0.37	1.48	0.786	21.4	4.24	0.337	0.337	<0.02	0.023	0.090	1.56
B2	02-May-19	2.815	0.014	0.755	4.60	70.0	1.23	56.9	4.02	117	<0.5	95.9	9.12	4.01	0.31	4.13	0.406	15.1	2.47	0.025	1.80	0.063	0.437	<0.015	1.94
B2	28-May-19	2.375	0.015	0.759	6.02	61.6	2.17	28.4	3.85	299	<0.5	187	185	4.19	<0.37	2.18	1.55	31.2	4.50	0.559	0.958	0.133	0.134	0.212	2.52
B2	11-Jul-19	2.481	0.015	0.759	5.68	63.4	2.15	29.5	3.91	116	<0.5	20.2	264	12.4	<0.37	1.84	0.836	32.7	4.07	0.423	1.32	<0.02	0.035	0.3015	1.87
B2	10-Aug-19	2.937	0.014	0.749	5.33	68.9	1.83	37.7	4.26	153	<0.5	11.5	298	3.78	<0.37	1.53	0.546	27.1	4.12	0.470	1.97	<0.02	0.029	0.344	1.58
B3	02-May-19	2.677	0.013	0.754	4.24	63.5	1.32	48.2	4.22	34.2	<0.5	82.7	74.0	5.43	0.90	5.07	0.338	19.9	2.42	0.025	1.01	0.036	0.435	<0.015	2.17
B3	28-May-19	3.270	0.012	0.709	4.09	68.4	3.44	19.9	4.78	37.2	1.80	207	712	23.6	3.41	2.26	2.67	36.1	5.41	0.445	1.66	0.125	0.259	0.928	3.10
B3	11-Jul-19	2.979	0.013	0.724	4.84	70.1	2.50	28.0	4.25	102	<0.5	15.5	453	3.65	<0.37	1.59	1.16	26.5	3.15	0.224	1.68	<0.02	0.045	0.489	1.95
B3	10-Aug-19	3.066	0.013	0.704	4.88	70.5	2.42	29.1	4.35	133	<0.5	16.8	287	4.42	<0.37	1.35	0.712	15.4	2.55	0.152	1.37	<0.02	0.053	0.289	1.66

Note: values in gray represent concentrations below the instrument limit of quantification (average blank + 10⁻¹(standard deviation of blank), or the lowest non-zero calibration point)

Table S2. PRS® Probe (In Situ Burials) Results

UNIT 5 Section	Number of PRS® probes installed		Nutrient Supply Rate (µg (10 cm ²) ⁻¹ month ⁻¹)													
	Anions	Cations	NO ₃ -N	NH ₄ -N	Ca	Mg	K	PO ₄ -P	Fe	Mn	Cu	Zn	B	S	Pb	Al
Burned (Treatment)	4	4	3.8	8.7	2079	257	261	15.3	1.6	33.6	0.06	1.1	0.7	356	0.1	6.3
Unburned (Control)	3	3	7.3	6.4	1251	231	195	0.9	2.3	10.6	0.15	0.9	3.2	68	0.1	29.0

Note:

Burial date: 10 July 2019; retrieval date: 10 August 2019

There was a small rip in probe membrane at well B2