

Table S1: Pairwise comparison results for Two-way ANOVA for the interaction of taxa and oxygen level. Oxygen levels (mg/L) are represented by letters (A = 12, B = 8, C = 6, D = 4, E = 2, F = 0.5, G = <0.5 (closed period), and H = 12 (recovery period)). Significant p-values are in bold.

Contrast	Estimate	SE	df	t.ratio	p.value
A,Aquifer - B,Aquifer	0.13372	0.1066	824	1.255	0.9972
A,Aquifer - C,Aquifer	0.10954	0.1066	824	1.028	0.9997
A,Aquifer - D,Aquifer	0.21281	0.1066	824	1.997	0.8267
A,Aquifer - E,Aquifer	0.27159	0.1066	824	2.548	0.437
A,Aquifer - F,Aquifer	0.46244	0.1066	824	4.339	0.0017
A,Aquifer - G,Aquifer	0.76634	0.1242	824	6.172	<.0001
A,Aquifer - H,Aquifer	0.35426	0.1066	824	3.324	0.0706
A,Aquifer - A,Benthic	-1.2503	0.1	824	-12.499	<.0001
A,Aquifer - B,Benthic	-0.7791	0.1019	824	-7.647	<.0001
A,Aquifer - C,Benthic	-0.5209	0.1019	824	-5.113	<.0001
A,Aquifer - D,Benthic	-0.3197	0.1	824	-3.196	0.1022
A,Aquifer - E,Benthic	0.09336	0.1	824	0.933	0.9999
A,Aquifer - F,Benthic	0.46609	0.1	824	4.659	0.0004
A,Aquifer - G,Benthic	0.78823	0.1031	824	7.643	<.0001
A,Aquifer - H,Benthic	-0.5484	0.104	824	-5.271	<.0001
B,Aquifer - C,Aquifer	-0.0242	0.1066	824	-0.227	1
B,Aquifer - D,Aquifer	0.07909	0.1066	824	0.742	1
B,Aquifer - E,Aquifer	0.13787	0.1066	824	1.294	0.9961
B,Aquifer - F,Aquifer	0.32872	0.1066	824	3.084	0.1381
B,Aquifer - G,Aquifer	0.63262	0.1242	824	5.095	<.0001
B,Aquifer - H,Aquifer	0.22054	0.1066	824	2.069	0.7842
B,Aquifer - A,Benthic	-1.384	0.1	824	-13.836	<.0001
B,Aquifer - B,Benthic	-0.9128	0.1019	824	-8.96	<.0001
B,Aquifer - C,Benthic	-0.6546	0.1019	824	-6.426	<.0001
B,Aquifer - D,Benthic	-0.4534	0.1	824	-4.533	0.0007
B,Aquifer - E,Benthic	-0.0404	0.1	824	-0.403	1
B,Aquifer - F,Benthic	0.33237	0.1	824	3.323	0.0709
B,Aquifer - G,Benthic	0.65451	0.1031	824	6.346	<.0001
B,Aquifer - H,Benthic	-0.6821	0.104	824	-6.556	<.0001
C,Aquifer - D,Aquifer	0.10327	0.1066	824	0.969	0.9999
C,Aquifer - E,Aquifer	0.16205	0.1066	824	1.521	0.98

C,Aquifer - F,Aquifer	0.35289	0.1066	824	3.311	0.0734
C,Aquifer - G,Aquifer	0.6568	0.1242	824	5.29	<.0001
C,Aquifer - H,Aquifer	0.24472	0.1066	824	2.296	0.6267
C,Aquifer - A,Benthic	-1.3599	0.1	824	-13.594	<.0001
C,Aquifer - B,Benthic	-0.8886	0.1019	824	-8.722	<.0001
C,Aquifer - C,Benthic	-0.6305	0.1019	824	-6.188	<.0001
C,Aquifer - D,Benthic	-0.4292	0.1	824	-4.291	0.0021
C,Aquifer - E,Benthic	-0.0162	0.1	824	-0.162	1
C,Aquifer - F,Benthic	0.35655	0.1	824	3.564	0.0331
C,Aquifer - G,Benthic	0.67869	0.1031	824	6.581	<.0001
C,Aquifer - H,Benthic	-0.6579	0.104	824	-6.324	<.0001
D,Aquifer - E,Aquifer	0.05878	0.1066	824	0.552	1
D,Aquifer - F,Aquifer	0.24963	0.1066	824	2.342	0.592
D,Aquifer - G,Aquifer	0.55353	0.1242	824	4.458	0.001
D,Aquifer - H,Aquifer	0.14145	0.1066	824	1.327	0.9949
D,Aquifer - A,Benthic	-1.4631	0.1	824	-14.627	<.0001
D,Aquifer - B,Benthic	-0.9919	0.1019	824	-9.736	<.0001
D,Aquifer - C,Benthic	-0.7337	0.1019	824	-7.202	<.0001
D,Aquifer - D,Benthic	-0.5325	0.1	824	-5.323	<.0001
D,Aquifer - E,Benthic	-0.1195	0.1	824	-1.194	0.9984
D,Aquifer - F,Benthic	0.25328	0.1	824	2.532	0.4489
D,Aquifer - G,Benthic	0.57542	0.1031	824	5.58	<.0001
D,Aquifer - H,Benthic	-0.7612	0.104	824	-7.317	<.0001
E,Aquifer - F,Aquifer	0.19084	0.1066	824	1.791	0.9194
E,Aquifer - G,Aquifer	0.49475	0.1242	824	3.985	0.0073
E,Aquifer - H,Aquifer	0.08267	0.1066	824	0.776	1
E,Aquifer - A,Benthic	-1.5219	0.1	824	-15.214	<.0001
E,Aquifer - B,Benthic	-1.0507	0.1019	824	-10.313	<.0001
E,Aquifer - C,Benthic	-0.7925	0.1019	824	-7.779	<.0001
E,Aquifer - D,Benthic	-0.5913	0.1	824	-5.911	<.0001
E,Aquifer - E,Benthic	-0.1782	0.1	824	-1.782	0.9224
E,Aquifer - F,Benthic	0.1945	0.1	824	1.944	0.8544
E,Aquifer - G,Benthic	0.51664	0.1031	824	5.01	0.0001
E,Aquifer - H,Benthic	-0.82	0.104	824	-7.882	<.0001
F,Aquifer - G,Aquifer	0.3039	0.1242	824	2.448	0.5119
F,Aquifer - H,Aquifer	-0.1082	0.1066	824	-1.015	0.9998
F,Aquifer - A,Benthic	-1.7127	0.1	824	-17.122	<.0001
F,Aquifer - B,Benthic	-1.2415	0.1019	824	-12.186	<.0001
F,Aquifer - C,Benthic	-0.9834	0.1019	824	-9.652	<.0001
F,Aquifer - D,Benthic	-0.7821	0.1	824	-7.819	<.0001
F,Aquifer - E,Benthic	-0.3691	0.1	824	-3.69	0.0216

F,Aquifer - F,Benthic	0.00365	0.1	824	0.037	1
F,Aquifer - G,Benthic	0.32579	0.1031	824	3.159	0.1131
F,Aquifer - H,Benthic	-1.0108	0.104	824	-9.716	<.0001
G,Aquifer - H,Aquifer	-0.4121	0.1242	824	-3.319	0.0717
G,Aquifer - A,Benthic	-2.0167	0.1186	824	-17.006	<.0001
G,Aquifer - B,Benthic	-1.5454	0.1201	824	-12.862	<.0001
G,Aquifer - C,Benthic	-1.2873	0.1201	824	-10.714	<.0001
G,Aquifer - D,Benthic	-1.086	0.1186	824	-9.158	<.0001
G,Aquifer - E,Benthic	-0.673	0.1186	824	-5.675	<.0001
G,Aquifer - F,Benthic	-0.3003	0.1186	824	-2.532	0.449
G,Aquifer - G,Benthic	0.02189	0.1212	824	0.181	1
G,Aquifer - H,Benthic	-1.3147	0.122	824	-10.778	<.0001
H,Aquifer - A,Benthic	-1.6046	0.1	824	-16.041	<.0001
H,Aquifer - B,Benthic	-1.1333	0.1019	824	-11.124	<.0001
H,Aquifer - C,Benthic	-0.8752	0.1019	824	-8.59	<.0001
H,Aquifer - D,Benthic	-0.674	0.1	824	-6.737	<.0001
H,Aquifer - E,Benthic	-0.2609	0.1	824	-2.608	0.3942
H,Aquifer - F,Benthic	0.11183	0.1	824	1.118	0.9992
H,Aquifer - G,Benthic	0.43396	0.1031	824	4.208	0.003
H,Aquifer - H,Benthic	-0.9026	0.104	824	-8.676	<.0001
A,Benthic - B,Benthic	0.47125	0.095	824	4.96	0.0001
A,Benthic - C,Benthic	0.7294	0.095	824	7.677	<.0001
A,Benthic - D,Benthic	0.93062	0.093	824	10.004	<.0001
A,Benthic - E,Benthic	1.34367	0.093	824	14.444	<.0001
A,Benthic - F,Benthic	1.71639	0.093	824	18.451	<.0001
A,Benthic - G,Benthic	2.03853	0.0964	824	21.158	<.0001
A,Benthic - H,Benthic	0.70194	0.0973	824	7.213	<.0001
B,Benthic - C,Benthic	0.25815	0.097	824	2.663	0.3568
B,Benthic - D,Benthic	0.45938	0.095	824	4.835	0.0002
B,Benthic - E,Benthic	0.87243	0.095	824	9.182	<.0001
B,Benthic - F,Benthic	1.24515	0.095	824	13.105	<.0001
B,Benthic - G,Benthic	1.56729	0.0983	824	15.949	<.0001
B,Benthic - H,Benthic	0.2307	0.0992	824	2.325	0.6049
C,Benthic - D,Benthic	0.20123	0.095	824	2.118	0.7532
C,Benthic - E,Benthic	0.61428	0.095	824	6.465	<.0001
C,Benthic - F,Benthic	0.987	0.095	824	10.388	<.0001
C,Benthic - G,Benthic	1.30914	0.0983	824	13.322	<.0001
C,Benthic - H,Benthic	-0.0275	0.0992	824	-0.277	1
D,Benthic - E,Benthic	0.41305	0.093	824	4.44	0.0011
D,Benthic - F,Benthic	0.78577	0.093	824	8.447	<.0001
D,Benthic - G,Benthic	1.10791	0.0964	824	11.499	<.0001

D,Benthic - H,Benthic	-0.2287	0.0973	824	-2.35	0.5863
E,Benthic - F,Benthic	0.37272	0.093	824	4.007	0.0067
E,Benthic - G,Benthic	0.69486	0.0964	824	7.212	<.0001
E,Benthic - H,Benthic	-0.6417	0.0973	824	-6.594	<.0001
F,Benthic - G,Benthic	0.32214	0.0964	824	3.343	0.0666
F,Benthic - H,Benthic	-1.0145	0.0973	824	-10.424	<.0001
G,Benthic - H,Benthic	-1.3366	0.1005	824	-13.3	<.0001