

# Phosphorus Distribution in Delta Sediments: A Case Study in Deer Creek Reservoir

## Supplemental Material

Warren Casbeer, Gustavious P. Williams \* and M. Brett Borup

Department of Civil and Environmental Engineering, Brigham Young University, Provo, UT 84602, USA; wcc@byu.net (W.C.); borupb@byu.edu (M.B.B.)

\* Correspondence: gus.williams@byu.edu; Tel.: +1-801-422-7810

**Table S1.** Coordinates for sample locations. Samples were not taken at locations 1-6 or 60.

Location	Longitude	Latitude	Location	Longitude	Latitude
1	-111.469757	40.4786989	31	-111.478968	40.4733033
2	-111.470901	40.4769083	32	-111.478956	40.4715174
3	-111.470913	40.4786942	33	-111.478943	40.4697315
4	-111.472070	40.4786895	34	-111.480099	40.4697267
5	-111.472057	40.4769036	35	-111.480112	40.4715126
6	-111.472044	40.4751177	36	-111.480124	40.4732985
7	-111.473201	40.4751130	37	-111.480137	40.4750844
8	-111.473213	40.4768989	38	-111.480150	40.4768702
9	-111.473226	40.4786848	39	-111.480163	40.4786561
10	-111.474382	40.4786800	40	-111.481319	40.4786513
11	-111.474370	40.4768941	41	-111.481306	40.4768654
12	-111.474357	40.4751082	42	-111.481293	40.4750796
13	-111.474344	40.4733223	43	-111.481280	40.4732937
14	-111.475500	40.4733176	44	-111.481268	40.4715078
15	-111.475513	40.4751035	45	-111.481255	40.4697219
16	-111.475525	40.4768894	46	-111.482411	40.4697170
17	-111.475538	40.4786753	47	-111.482424	40.4715029
18	-111.476694	40.4786705	48	-111.482437	40.4732888
19	-111.476682	40.4768846	49	-111.482449	40.4750747
20	-111.476669	40.4750987	50	-111.482462	40.4768606
21	-111.476656	40.4733128	51	-111.482475	40.4786465
22	-111.476644	40.4715269	52	-111.483631	40.4786417
23	-111.477800	40.4715222	53	-111.483618	40.4768558
24	-111.477812	40.4733080	54	-111.483606	40.4750699
25	-111.477825	40.4750939	55	-111.483593	40.4732840
26	-111.477838	40.4768798	56	-111.483580	40.4714981
27	-111.477850	40.4786657	57	-111.483567	40.4697122
28	-111.479006	40.4786609	58	-111.484723	40.4697074
29	-111.478994	40.4768750	59	-111.484762	40.4750651
30	-111.478981	40.4750892	60	-111.484787	40.4786368

**Table S2.** Summary of sediment P concentrations ( $\text{mg}\cdot\text{g}^{-1}$ ) for Sample Locations 7-29.

Location	Depth (ft)	WS	KCl	NaOH	HCl	PFD	Total P
7	0	2.80E-02	-	-	-	-	-
8	0	9.46E-03	-	-	-	-	-
9	0	8.45E-03	-	-	-	-	-
near9	0	9.71E-03	4.92E-03	5.30E-02	1.28E-01	1.39E+00	1.59E+00
10	0	5.93E-03	-	-	-	-	-
10	0.5	3.97E-03	-	-	-	-	-
10	1	4.00E-03	-	-	-	-	-
11	0	4.96E-03	-	-	-	-	-
11	0.5	6.95E-03	-	-	-	-	-
11muck	0	5.97E-03	-	-	-	-	-
12	0	6.14E-03	6.19E-03	1.27E-01	1.20E+00	1.38E+00	2.72E+00
12	0.5	3.39E-03	-	-	-	-	-
12	1	3.70E-03	-	-	-	-	-
12	2	3.89E-03	3.58E-03	8.98E-02	-	8.23E-01	-
13	0	6.48E-03	-	-	-	-	-
near13	0	5.38E-03	-	-	-	-	-
14	0	7.14E-03	-	-	-	-	-
15	0	4.75E-03	-	-	-	-	-
16	0	4.70E-03	-	-	-	-	-
17	0	2.21E-02	-	-	-	-	-
18	0	9.81E-03	-	-	-	-	-
18	0.5	3.19E-03	-	-	-	-	-
18	1	4.06E-03	-	-	-	-	-
19	0	5.52E-03	-	-	-	-	-
19	0.5	4.52E-03	-	-	-	-	-
19	1	5.48E-03	-	-	-	-	-
20	0	4.06E-03	5.74E-03	1.34E-01	7.27E-01	1.16E+00	2.04E+00
20	0.5	4.93E-03	-	-	-	-	-
20	1	4.94E-03	-	-	-	-	-
20	2	4.49E-03	3.67E-03	1.73E-01	1.10E+00	1.48E+00	2.76E+00
21	0	1.27E-02	-	-	-	-	-
21	0.5	9.52E-03	-	-	-	-	-
21	1	4.49E-03	-	-	-	-	-
22	0	6.02E-03	1.10E-02	4.60E-01	6.78E-01	1.81E+00	2.97E+00
22	0.5	7.93E-03	-	-	-	-	-
22	1	4.66E-03	6.58E-03	2.70E-01	5.01E-01	8.31E-01	1.61E+00
23	0	2.80E-03	3.22E-03	1.86E-01	9.58E-01	9.32E-01	2.08E+00
24	0	5.81E-03	-	1.07E-01	1.34E+00	9.11E-01	-
25	0	3.53E-03	-	-	-	-	-
26	0	4.50E-03	-	-	-	-	-
27	0	3.88E-03	-	-	-	-	-
28	0	2.52E-03	-	-	-	-	-
29	0	2.70E-03	2.53E-03	1.86E-01	9.46E-01	1.44E+00	2.58E+00
29	0.5	2.80E-03	-	-	-	-	-
29	1	2.87E-03	3.02E-03	1.71E-01	1.14E+00	2.68E+00	4.00E+00

**Table S3.** Summary of sediment P concentrations ( $\text{mg}\cdot\text{g}^{-1}$ ) for sample locations 30-59.

Location	Depth (ft)	WS	KCl	NaOH	HCl	PFD	Total P
30	0	2.28E-03	3.72E-03	1.35E-01	1.25E+00	2.64E+00	4.04E+00
30	0.5	2.55E-03	-	-	-	-	-
30	1	2.37E-03	-	-	-	-	-
30	2	4.42E-03	5.00E-03	2.38E-01	8.54E-01	3.23E+00	4.33E+00
31	0	4.48E-03	3.94E-03	1.88E-01	1.08E+00	1.00E+00	2.28E+00
31	0.5	3.69E-03	-	-	-	-	-
31	1	5.60E-03	6.56E-03	2.24E-01	1.03E+00	1.03E+00	2.30E+00
32	0	-	4.00E-03	1.51E-01	1.01E+00	1.06E+00	-
32	0.5	3.01E-03	-	-	-	-	-
32	1	-	3.99E-03	1.72E-01	9.61E-01	1.12E+00	-
33	0	5.34E-03	5.93E-03	2.01E-01	1.09E+00	1.53E+00	2.83E+00
34a	0	3.47E-03	-	-	-	-	-
34b	0	5.40E-03	-	-	-	-	-
35	0	-	5.18E-03	1.83E-01	8.98E-01	1.34E+00	-
36	0	2.91E-03	-	-	-	-	-
37	0	2.80E-03	-	-	-	-	-
38	0	4.80E-03	-	-	-	-	-
39	0	7.86E-03	-	-	-	-	-
40	0	3.23E-03	-	-	-	-	-
41	0	5.01E-03	-	-	-	-	-
42	0	5.76E-03	-	-	-	-	-
42	0.5	3.37E-03	-	-	-	-	-
42	1	3.99E-03	-	-	-	-	-
42	2	3.15E-03	-	-	-	-	-
43	0	6.01E-03	-	-	-	-	-
43	0.5	3.28E-03	-	-	-	-	-
43	1	3.49E-03	-	-	-	-	-
44	0	4.53E-03	-	-	-	-	-
44	0.5	3.33E-03	-	-	-	-	-
44	1	3.08E-03	-	-	-	-	-
45	0	3.83E-03	-	-	-	-	-
46	0	4.42E-03	-	-	-	-	-
47	0	3.10E-03	-	-	-	-	-
48	0	2.71E-03	-	-	-	-	-
49	0	5.54E-03	-	-	-	-	-
50	0	3.22E-03	-	-	-	-	-
51	0	5.24E-03	-	-	-	-	-
52	0	3.89E-03	-	-	-	-	-
53	0	3.16E-03	-	-	-	-	-
54	0	3.23E-03	-	-	-	-	-
55	0	3.01E-03	-	-	-	-	-
56	0	2.67E-03	-	-	-	-	-
57	0	2.65E-03	-	-	-	-	-
58	0	3.10E-03	-	-	-	-	-
59	0	3.37E-03	-	-	-	-	-

