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## Report Addendum: Statistical Test Data

### Kolmogorov-Smirnov two-way tests

All transect data		D-statistic	p
Area 1 Pre	Area 1 Post	0.0879	0.066
Area 1 Pre	Area 1 Pre Controls	0.3561	<0.001
Area 1 Post	Area 1 Post Controls	0.5145	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.1288	<0.001
Area 2 Pre	Area 2 Post	0.3058	<0.001
Area 2 Pre	Area 2 Controls Pre	0.3301	<0.001
Area 2 Post	Area 2 Controls Post	0.4321	<0.001
Area 2 Controls Pre	Area 2 Controls Post	0.1759	<0.001

Transect data, no dry samples		D-statistic	p
Area 1 Pre	Area 1 Post	0.2655	<0.001
Area 1 Pre	Area 1 Pre Controls	0.2754	<0.001
Area 1 Post	Area 1 Post Controls	0.5768	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.1431	<0.001
Area 2 Pre	Area 2 Post	0.1522	<0.001
Area 2 Pre	Area 2 Controls Pre	0.2552	<0.001
Area 2 Post	Area 2 Controls Post	0.2495	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.1528	<0.001

Larvae per event, targeted sampling		D-statistic	p
Area 1 Pre	Area 1 Post	0.5117	0.007
Area 1 Pre	Area 1 Pre Controls	0.1548	0.987
Area 1 Post	Area 1 Post Controls	0.4313	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.3164	0.043
Area 2 Pre	Area 2 Post	0.2109	0.369
Area 2 Pre	Area 2 Controls Pre	0.1638	0.620
Area 2 Post	Area 2 Controls Post	0.3023	0.008
Area 2 Control Pre	Area 2 Controls Post	0.2081	0.084

Number of sampling points with larvae per event, targeted sampling		D-statistic	p
Area 1 Pre	Area 1 Post	0.5805	0.001
Area 1 Pre	Area 1 Pre Controls	0.1905	0.906
Area 1 Post	Area 1 Post Controls	0.4911	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.3164	0.043
Area 2 Pre	Area 2 Post	0.2008	0.431
Area 2 Pre	Area 2 Controls Pre	01638	0.620
Area 2 Post	Area 2 Controls Post	0.3721	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.2657	0.011

Bare ground cover type, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.4722	<0.001
Area 1 Pre	Area 1 Pre Controls	0.3667	<0.001
Area 1 Post	Area 1 Post Controls	0.2688	0.002
Area 1 Controls Pre	Area 1 Controls Post	0.3074	<0.001
Area 2 Pre	Area 2 Post	0.2778	0.019
Area 2 Pre	Area 2 Controls Pre	0.2611	0.003
Area 2 Post	Area 2 Controls Post	0.2792	0.015
Area 2 Control Pre	Area 2 Controls Post	0.2750	0.001

Bare ground cover where detected, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.3375	0.059
Area 1 Pre	Area 1 Pre Controls	0.2307	0.26
Area 1 Post	Area 1 Post Controls	0.3571	0.17
Area 1 Controls Pre	Area 1 Controls Post	0.3361	0.17
Area 2 Pre	Area 2 Post	0.6200	<0.001
Area 2 Pre	Area 2 Controls Pre	0.2894	0.15
Area 2 Post	Area 2 Controls Post	0.3429	0.23
Area 2 Control Pre	Area 2 Controls Post	0.3361	0.17

Phragmites ground cover type, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.2153	0.12
Area 1 Pre	Area 1 Pre Controls	0.2500	0.039
Area 1 Post	Area 1 Post Controls	0.2743	0.002
Area 1 Controls Pre	Area 1 Controls Post	0.2129	0.021
Area 2 Pre	Area 2 Post	0.2917	0.011
Area 2 Pre	Area 2 Controls Pre	0.3146	<0.001
Area 2 Post	Area 2 Controls Post	0.3500	0.001
Area 2 Control Pre	Area 2 Controls Post	0.2417	0.006

Phragmites ground cover type, where detected, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.5657	0.002
Area 1 Pre	Area 1 Pre Controls	0.4017	0.046
Area 1 Post	Area 1 Post Controls	0.3636	0.045
Area 1 Controls Pre	Area 1 Controls Post	0.2156	0.459
Area 2 Pre	Area 2 Controls Pre	0.1964	0.758
Area 2 Control Pre	Area 2 Controls Post	0.2482	0.317

Scirpus robustus ground cover type, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.3333	0.002
Area 1 Post	Area 1 Post Controls	0.3000	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.3333	<0.001
Area 2 Pre	Area 2 Post	0.3194	0.004
Area 2 Pre	Area 2 Controls Pre	0.3889	<0.001<
Area 2 Post	Area 2 Controls Post	0.3833	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.3250	<0.001

S. sempervirens ground cover type, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.3056	0.007
Area 1 Pre	Area 1 Pre Controls	0.3667	<0.001
Area 1 Post	Area 1 Post Controls	0.2667	0.003
Area 1 Controls Pre	Area 1 Controls Post	0.3333	<0.001
Area 2 Pre	Area 2 Post	0.3264	0.003
Area 2 Pre	Area 2 Controls Pre	0.3500	<0.001
Area 2 Post	Area 2 Controls Post	0.3917	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.3083	<0.001

Schoenoplectus pungens ground cover type, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.1736	0.32
Area 1 Pre	Area 1 Pre Controls	0.4248	<0.001
Area 1 Post	Area 1 Post Controls	0.2889	0.001
Area 1 Controls Pre	Area 1 Controls Post	0.3000	<0.001
Area 2 Pre	Area 2 Post	0.2986	0.009
Area 2 Pre	Area 2 Controls Pre	0.3722	<0.001
Area 2 Post	Area 2 Controls Post	0.3583	0.001
Area 2 Control Pre	Area 2 Controls Post	0.3000	<0.001

<i>S. patens</i> ground cover type, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.3542	0.001
Area 1 Pre	Area 1 Pre Controls	0.2500	0.039
Area 1 Post	Area 1 Post Controls	0.3500	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.1250	0.417
Area 2 Pre	Area 2 Post	0.5139	<0.001
Area 2 Pre	Area 2 Controls Pre	0.1750	0.113
Area 2 Post	Area 2 Controls Post	0.3625	0.001
Area 2 Control Pre	Area 2 Controls Post	0.2417	0.006

<i>S. patens</i> ground cover type, where detected, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.4872	<0.001
Area 1 Pre	Area 1 Pre Controls	0.2817	0.029
Area 1 Post	Area 1 Post Controls	0.4038	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.1442	0.319
Area 2 Pre	Area 2 Post	0.5522	<0.001
Area 2 Pre	Area 2 Controls Pre	0.2019	0.062
Area 2 Post	Area 2 Controls Post	0.4085	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.2788	0.002

<i>S. alterniflora</i> ground cover type, quadrat data		D-statistic	p
Area 1 Pre	Area 1 Post	0.3194	0.004
Area 1 Pre	Area 1 Pre Controls	0.4417	<0.001
Area 1 Post	Area 1 Post Controls	0.4556	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.1750	0.094
Area 2 Pre	Area 2 Post	0.1806	0.276
Area 2 Pre	Area 2 Controls Pre	0.2111	0.031
Area 2 Post	Area 2 Controls Post	0.2167	0.103
Area 2 Control Pre	Area 2 Controls Post	0.1750	0.094

Above-ground Biomass		D-statistic	p
Area 1 Pre	Area 1 Post	0.2500	0.269
Area 1 Pre	Area 1 Pre Controls	0.1513	0.860
Area 1 Post	Area 1 Post Controls	0.1340	0.767
Area 1 Controls Pre	Area 1 Controls Post	0.2024	0.272
Area 2 Pre	Area 2 Post	0.2143	0.391
Area 2 Pre	Area 2 Post*	0.1500	0.850
Area 2 Pre	Area 2 Controls Pre	0.1443	0.6773
Area 2 Post	Area 2 Controls Post	0.2390	0.270
Area 2 Post*	Area 2 Controls Post*	0.1884	0.661
Area 2 Control Pre	Area 2 Controls Post	0.0918	0.960
Area 2 Control Pre	Area 2 Controls Post*	0.1140	0.912

\* all 0 results removed

Above- and below-ground Biomass		D-statistic	p
Area 1 Pre	Area 1 Post	0.3333	0.33
Area 1 Pre	Area 1 Pre Controls	0.3561	0.221
Area 1 Post	Area 1 Post Controls	0.3621	0.083
Area 1 Post	Area 1 Post Controls*	0.3389	0.184
Area 1 Controls Pre	Area 1 Controls Post	0.6693	<0.001
Area 1 Controls Pre	Area 1 Controls Post*	0.6299	<0.001
Area 2 Pre	Area 2 Post	0.5421	0.026
Area 2 Pre	Area 2 Controls Pre	0.4359	0.014
Area 2 Post	Area 2 Controls Post	0.6474	0.002
Area 2 Post	Area 2 Controls Post*	0.6091	0.023
Area 2 Control Pre	Area 2 Controls Post	0.5510	0.001
Area 2 Control Pre	Area 2 Controls Post*	0.5208	0.02

\* 2007 data removed

Vegetation Invertebrates: Arachnids		D-statistic	p
Area 1 Pre	Area 1 Post	0.1667	0.930
Area 1 Pre	Area 1 Pre Controls	0.3467	0.142
Area 1 Post	Area 1 Post Controls	0.2853	0.147
Area 1 Controls Pre	Area 1 Controls Post	0.2179	0.402
Area 2 Pre	Area 2 Post	0.3667	0.317
Area 2 Pre	Area 2 Controls Pre	0.2923	0.267
Area 2 Post	Area 2 Controls Post	0.5923	0.007
Area 2 Controls Pre	Area 2 Controls Post	0.2179	0.402

Vegetation Invertebrates: Crustaceans		D-statistic	p
Area 1 Pre	Area 1 Post	0.5417	0.004
Area 1 Pre	Area 1 Pre Controls	0.2163	0.687
Area 1 Post	Area 1 Post Controls	0.3910	0.015
Area 1 Controls Pre	Area 1 Controls Post	0.3333	0.048
Area 2 Pre	Area 2 Post	0.7667	0.001
Area 2 Pre	Area 2 Controls Pre	0.3949	0.049
Area 2 Post	Area 2 Controls Post	0.6462	0.002
Area 2 Controls Pre	Area 2 Controls Post	0.3718	0.019

Vegetation Invertebrates: Insects		D-statistic	P
Area 1 Pre	Area 1 Post	0.3542	0.140
Area 1 Pre	Area 1 Pre Controls	0.5433	0.001
Area 1 Post	Area 1 Post Controls	0.2917	0.131
Area 1 Controls Pre	Area 1 Controls Post	0.1410	0.892
Area 2 Pre	Area 2 Post	0.2000	0.947
Area 2 Pre	Area 2 Controls Pre	0.1897	0.786
Area 2 Post	Area 2 Controls Post	0.3308	0.337
Area 2 Controls Pre	Area 2 Controls Post	0.1795	0.652

Vegetation Invertebrates: Gastropods		D-statistic	p
Area 1 Pre	Area 1 Post	0.4583	0.023
Area 1 Pre	Area 1 Pre Controls	0.1683	0.917
Area 1 Post	Area 1 Post Controls	0.2596	0.230
Area 1 Controls Pre	Area 1 Controls Post	0.2692	0.175
Area 2 Pre	Area 2 Post	0.3000	0.570
Area 2 Pre	Area 2 Controls Pre	0.3282	0.155
Area 2 Post	Area 2 Controls Post	0.5154	0.027
Area 2 Controls Pre	Area 2 Controls Post	0.1923	0.564

Vegetation Invertebrates: Total Organisms		D-statistic	p
Area 1 Pre	Area 1 Post	0.4167	0.051
Area 1 Pre	Area 1 Pre Controls	0.2308	0.607
Area 1 Post	Area 1 Post Controls	0.4583	0.002
Area 1 Controls Pre	Area 1 Controls Post	0.2692	0.175
Area 2 Pre	Area 2 Post	0.5667	0.025
Area 2 Pre	Area 2 Controls Pre	0.4769	0.009
Area 2 Post	Area 2 Controls Post	0.6538	0.002
Area 2 Controls Pre	Area 2 Controls Post	0.2308	0.333

Water Column Invertebrates: Crustaceans		D-statistic	p
Area 1 Pre	Area 1 Post	0.2381	0.665
Area 1 Pre	Area 1 Pre Controls	0.1786	0.891
Area 1 Post	Area 1 Post Controls	0.2555	0.288
Area 1 Controls Pre	Area 1 Controls Post	0.1821	0.601
Area 2 Pre	Area 2 Post	0.2381	0.665
Area 2 Pre	Area 2 Controls Pre	0.2857	0.169
Area 2 Post	Area 2 Controls Post	0.3185	0.231
Area 2 Controls Pre	Area 2 Controls Post	0.1455	0.849

Water Column Invertebrates: Insects		D-statistic	p
Area 1 Pre	Area 1 Post	0.1429	0.991
Area 1 Pre	Area 1 Pre Controls	0.2143	0.731
Area 1 Post	Area 1 Post Controls	0.2695	0.225
Area 1 Controls Pre	Area 1 Controls Post	0.1350	0.901
Area 2 Pre	Area 2 Post	0.4048	0.094
Area 2 Pre	Area 2 Controls Pre	0.1905	0.642
Area 2 Post	Area 2 Controls Post	0.3783	0.108
Area 2 Controls Pre	Area 2 Controls Post	0.1376	0.892

Water Column Invertebrates: Total Organisms		D-statistic	p
Area 1 Pre	Area 1 Post	0.4286	0.065
Area 1 Pre	Area 1 Pre Controls	0.2857	0.369
Area 1 Post	Area 1 Post Controls	0.2811	0.186
Area 1 Controls Pre	Area 1 Controls Post	0.1463	0.839
Area 2 Pre	Area 2 Post	0.5238	0.012
Area 2 Pre	Area 2 Controls Pre	0.1190	0.983
Area 2 Post	Area 2 Controls Post	0.4523	0.031
Area 2 Controls Pre	Area 2 Controls Post	0.1349	0.905

Benthic invertebrates: crustaceans		D-statistic	p
Area 1 Pre	Area 1 Post	0.2143	0.784
Area 1 Pre	Area 1 Pre Controls	0.3095	0.283
Area 1 Post	Area 1 Post Controls	0.3571	0.042
Area 1 Controls Pre	Area 1 Controls Post	0.1984	0.491
Area 2 Pre	Area 2 Post	0.2137	0.835
Area 2 Pre	Area 2 Controls Pre	0.4986	0.002
Area 2 Post	Area 2 Controls Post	0.4121	0.071
Area 2 Controls Pre	Area 2 Controls Post	0.2352	0.277

Benthic invertebrates: insects		D-statistic	p
Area 1 Pre	Area 1 Post	0.3333	0.250
Area 1 Pre	Area 1 Pre Controls	0.2407	0.596
Area 1 Post	Area 1 Post Controls	0.5000	0.001
Area 1 Controls Pre	Area 1 Controls Post	0.2831	0.118
Area 2 Pre	Area 2 Post	0.1923	0.913
Area 2 Pre	Area 2 Controls Pre	0.2857	0.281
Area 2 Post	Area 2 Controls Post	0.3709	0.134
Area 2 Controls Pre	Area 2 Controls Post	0.2125	0.395

Benthic invertebrates: polychaetes		D-statistic	p
Area 1 Pre	Area 1 Post	0.3571	0.184
Area 1 Pre	Area 1 Pre Controls	0.3413	0.186
Area 1 Post	Area 1 Post Controls	0.2619	0.250
Area 1 Controls Pre	Area 1 Controls Post	0.1984	0.491
Area 2 Pre	Area 2 Post	0.1923	0.923
Area 2 Pre	Area 2 Controls Pre	0.2778	0.321
Area 2 Post	Area 2 Controls Post	0.4780	0.014
Area 2 Controls Pre	Area 2 Controls Post	0.1984	0.491

Benthic invertebrates: oligochaetes		D-statistic	p
Area 1 Pre	Area 1 Post	0.7857	<0.001
Area 1 Pre	Area 1 Pre Controls	0.4524	0.031
Area 1 Post	Area 1 Post Controls	0.4452	0.006
Area 1 Controls Pre	Area 1 Controls Post	0.2354	0.282
Area 2 Pre	Area 2 Post	0.2778	0.532
Area 2 Pre	Area 2 Controls Pre	0.4363	0.011
Area 2 Post	Area 2 Controls Post	0.5357	0.007
Area 2 Controls Pre	Area 2 Controls Post	0.2038	0.448

Benthic invertebrates: all organisms		D-statistic	p
Area 1 Pre	Area 1 Post	0.2143	0.784
Area 1 Pre	Area 1 Pre Controls	0.3095	0.283
Area 1 Post	Area 1 Post Controls	0.2857	0.169
Area 1 Controls Pre	Area 1 Controls Post	0.2302	0.307
Area 2 Pre	Area 2 Post	0.1966	0.900
Area 2 Pre	Area 2 Controls Pre	0.3144	0.136
Area 2 Post	Area 2 Controls Post	0.3874	0.107
Area 2 Controls Pre	Area 2 Controls Post	0.1995	0.476

C. variegates abundance		D-statistic	p
Area 1 Pre	Area 1 Post	0.5122	<0.001
Area 1 Pre	Area 1 Pre Controls	n/a	
Area 1 Post	Area 1 Post Controls	0.4183	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.5556	<0.001
Area 2 Pre	Area 2 Post	0.2742	0.018
Area 2 Pre	Area 2 Controls Pre	0.4929	<0.001
Area 2 Post	Area 2 Controls Post	0.4032	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.1274	0.229

F. heteroclitus abundance		D-statistic	p
Area 1 Pre	Area 1 Post	0.4988	<0.001
Area 1 Pre	Area 1 Pre Controls	0.4375	<0.001
Area 1 Post	Area 1 Post Controls	0.2257	0.005
Area 1 Controls Pre	Area 1 Controls Post	0.3056	<0.001
Area 2 Pre	Area 2 Post	0.1335	0.631
Area 2 Pre	Area 2 Controls Pre	0.2214	0.017
Area 2 Post	Area 2 Controls Post	0.2942	0.003
Area 2 Control Pre	Area 2 Controls Post	0.1595	0.067

L. parva abundance		D-statistic	p
Area 1 Pre	Area 1 Post	0.3841	<0.001
Area 1 Pre	Area 1 Pre Controls	0.3750	0.001
Area 1 Post	Area 1 Post Controls	0.3917	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.3681	<0.001
Area 2 Pre	Area 2 Post	0.4187	<0.001
Area 2 Pre	Area 2 Controls Pre	0.2500	0.005
Area 2 Post	Area 2 Controls Post	0.5122	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.100	0.516

Palaemonetes abundance		D-statistic	p
Area 1 Pre	Area 1 Post	0.5122	<0.001
Area 1 Pre	Area 1 Pre Controls	0.5000	<0.001
Area 1 Post	Area 1 Post Controls	0.4050	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.4653	<0.001
Area 2 Pre	Area 2 Post	0.1879	0.218
Area 2 Pre	Area 2 Controls Pre	0.3643	<0.001
Area 2 Post	Area 2 Controls Post	0.4141	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.1250	0.248

Total nekton abundance		D-statistic	p
Area 1 Pre	Area 1 Post	0.5470	<0.001
Area 1 Pre	Area 1 Pre Controls	0.3375	0.003
Area 1 Post	Area 1 Post Controls	0.2278	0.005
Area 1 Controls Pre	Area 1 Controls Post	0.2153	0.010
Area 2 Pre	Area 2 Post	0.1522	0.461
Area 2 Pre	Area 2 Controls Pre	0.1571	0.182
Area 2 Post	Area 2 Controls Post	0.3436	<0.001
Area 2 Control Pre	Area 2 Controls Post	0.1179	0.342

2003 Ditch salinity survey		D-statistic	p
Area 1	Area 2	0.8066	<0.001
Area 1	Area 3	0.2742	0.033
Area 1	Area 4	0.3930	<0.001
Area 2	Area 3	0.5610	<0.001
Area 2	Area 4	0.4555	<0.001
Area 3	Area 4	0.2329	0.102

Temperature, nekton sampling		D-statistic	p
Area 1 Pre	Area 1 Post	0.5024	<0.001
Area 1 Pre	Area 1 Pre Controls	0.2289	0.125
Area 1 Post	Area 1 Post Controls	0.1423	0.268
Area 1 Controls Pre	Area 1 Controls Post	0.3288	<0.001
Area 2 Pre	Area 2 Post	0.3533	0.002
Area 2 Pre	Area 2 Controls Pre	0.2329	0.022
Area 2 Post	Area 2 Controls Post	0.1918	0.133
Area 2 Control Pre	Area 2 Controls Post	0.1576	0.096

Salinity, nekton sampling		D-statistic	p
Area 1 Pre	Area 1 Post	0.3451	0.004
Area 1 Pre	Area 1 Pre Controls	0.3096	0.003
Area 1 Post	Area 1 Post Controls	0.3064	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.1082	0.531
Area 2 Pre	Area 2 Post	0.4377	<0.001
Area 2 Pre	Area 2 Controls Pre	0.3189	<0.001
Area 2 Post	Area 2 Controls Post	0.1573	0.321
Area 2 Control Pre	Area 2 Controls Post	0.1670	0.051

DO, nekton sampling		D-statistic	p
Area 1 Pre	Area 1 Post	0.4815	<0.001
Area 1 Pre	Area 1 Pre Controls	0.3348	0.017
Area 1 Post	Area 1 Post Controls	0.2803	0.001
Area 1 Controls Pre	Area 1 Controls Post	0.1677	0.116
Area 2 Pre	Area 2 Post	0.4489	<0.001
Area 2 Pre	Area 2 Controls Pre	0.2895	0.009
Area 2 Post	Area 2 Controls Post	0.2869	0.007
Area 2 Control Pre	Area 2 Controls Post	0.1583	0.133

**Normal Data? (Kolmogorov-Smirnov one-way test)**

All transect data	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Transect data, no dry samples	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Targeted sampling larvae per event	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	0.04
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Number of sampling points with larvae per event, targeted sampling	Y/N?	p
Area 1 Pre	N	0.07
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	0.10
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Bare ground cover type, quadrat data	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Bare ground cover, where detected, quadrat data	Y/N?	p
Area 1 Pre	N	<0.00
Area 1 Post	Y	
	Log-normal	0.83
Area 1 Controls Pre	Y	
	Log-normal	0.65
Area 1 Controls Post	Y	
	Log-normal	0.47
	Normal	0.48
Area 2 Pre	Y	
	Log-normal	0.32
Area 2 Post	Y	
	Normal	0.36
Area 2 Controls Pre	Y	
	Log-normal	0.65
Area 2 Controls Post	Y	
	Log-normal	0.47
	Normal	0.48

Phragmites ground cover type, quadrat data	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Phragmites ground cover type, where detected, quadrat data	Y/N?	p
Area 1 Pre	Y Normal	0.58
Area 1 Post	Y Normal	0.41
Area 1 Controls Pre	Y Normal	0.37
Area 1 Controls Post	Maybe Log-normal	0.23
Area 2 Pre	Y Normal Log-normal	0.92 0.65
Area 2 Controls Pre	Y Normal	0.36
Area 2 Controls Post	Maybe Log-normal	0.23

S. robustus ground cover type, quadrat data	Y/N?	p
Area 1 Pre	n/a	
Area 1 Post	N	<0.01
Area 1 Controls Pre	n/a	
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

S. semperflorens ground cover type, quadrat data	Y/N?	P
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	n/a	
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Schoenoplectus pungens ground cover type, quadrat data	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

S. patens ground cover type, quadrat data	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

S. patens ground cover type, where detected, quadrat data	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

S. alterniflora ground cover type, quadrat data	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Aboveground Biomass	Y/N?	p
Area 1 Pre	Y	
	Normal	0.98
	Maybe Log-normal	0.23
Area 1 Post	Y	
	Log-normal	0.58
Area 1 Controls Pre	N	0.01
Area 1 Controls Post	Maybe	
	Normal	0.13
Area 2 Pre	N	<0.01
Area 2 Post	Y	
	Normal	0.75
Area 2 Post*	Y	
	Normal	0.33
	Log-normal	0.98
Area 2 Controls Pre	N	0.02
Area 2 Controls Post	Maybe	
	Normal	0.13
Area 2 Controls Post*	N	0.08

\* All 0's removed

Above- and below-ground Biomass	Y/N?	p
Area 1 Pre	Y	
	Normal	1
	Log-normal	0.98
Area 1 Post	Y	
	Normal	0.59
	Log-normal	0.94
Area 1 Controls Pre	Y	
	Log-normal	0.67
Area 1 Controls Post	Maybe	
	Log-normal	0.11
Area 1 Controls Post*	Y	
	Log-normal	0.35
Area 2 Pre	Y	
	Log-normal	0.36
Area 2 Post	Y	
	Normal	0.65
	Log-normal	0.99
Area 2 Controls Pre	Y	
	Log-normal	0.83
Area 2 Controls Post	Y	
	Log-normal	0.58
Area 2 Controls Post*	Y	
	Normal	0.58
	Log-normal	0.28

\*2007 data removed

Vegetation Invertebrates: Arachnids	Y/N?	p
Area 1 Pre	Maybe Normal	0.16
Area 1 Post	N	0.04
Area 1 Controls Pre	N	0.03
Area 1 Controls Post	N	<0.01
Area 2 Pre	Y	0.99
Area 2 Post	Y	0.59
Area 2 Controls Pre	N	0.02
Area 2 Controls Post	N	<0.01

Vegetation Invertebrates: Crustaceans	Y/N?	p
Area 1 Pre	Y Log-normal	0.97
Area 1 Post	N	0.01
Area 1 Controls Pre	Maybe Normal	0.12
Area 1 Controls Post	N	<0.01
Area 2 Pre	Y Log-normal	0.93
Area 2 Post	Maybe Normal	0.21
Area 2 Controls Pre	N	0.01
Area 2 Controls Post	N	0.07

Vegetation Invertebrates: Insects	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	0.05
Area 1 Controls Pre	N	0.02
Area 1 Controls Post	N	<0.01
Area 2 Pre	Y Normal	0.86
Area 2 Post	Y Normal	0.76
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Vegetation Invertebrates: Gastropods	Y/N?	p
Area 1 Pre	N	0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	0.03
Area 2 Post	N	0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Vegetation Invertebrates: Total Organisms	Y/N?	p
Area 1 Pre	Maybe	
	Normal	0.24
	Y	
	Log-normal	1.00
Area 1 Post	Y	
	Log-normal	0.96
Area 1 Controls Pre	Maybe	
	Normal	0.12
Area 1 Controls Post	Maybe	
	Log-normal	0.14
Area 2 Pre	Y	
	Normal	0.88
	Log-normal	0.94
Area 2 Post	Y	
	Normal	0.92
Area 2 Controls Pre	N	0.01
Area 2 Controls Post	Y	
	Log-normal	0.33

Water Column Invertebrates: Crustaceans	Y/N?	p
Area 1 Pre	Maybe	
	Normal	0.23
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Water Column Invertebrates: Insects	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	0.01
Area 2 Post	N	0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Water Column Invertebrates: Total Organisms	Y/N?	p
Area 1 Pre	Y Log-normal	0.37
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	0.09
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	Maybe Normal	0.14
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Benthic invertebrates: crustaceans	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Benthic invertebrates: insects	Y/N?	p
Area 1 Pre	N	0.02
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Benthic invertebrates: polychaetes	Y/N?	p
Area 1 Pre	N	0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Benthic invertebrates: oligochaetes	Y/N?	p
Area 1 Pre	N	0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	n/a	
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Benthic invertebrates: all organisms	Y/N?	p
Area 1 Pre	Maybe Normal Y Log-normal	0.12  0.76
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

C. variegates abundance	Y/N?	p
Area 1 Pre	n/a	
Area 1 Post	N	<0.01
Area 1 Controls Pre	n/a	
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

F. heteroclitus abundance	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

L. parva abundance	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Palaemonetes abundance	Y/N?	p
Area 1 Pre	n/a	
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Total nekton abundance	Y/N?	p
Area 1 Pre	N	<0.01
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	<0.01
Area 1 Controls Post	N	<0.01
Area 2 Pre	N	<0.01
Area 2 Post	N	<0.01
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

Temperature, nekton sampling	Y/N?	p
Area 1 Pre	Y	
	Normal	0.81
	Maybe	
	Log-normal	0.24
Area 1 Post	Y	
	Normal	0.61
	Maybe	
	Log-normal	0.11
Area 1 Controls Pre	Maybe	
	Log-normal	0.10
Area 1 Controls Post	Y	
	Normal	0.64
Area 2 Pre	Maybe	
	Normal	0.15
Area 2 Post	Maybe	
	Normal	0.12
Area 2 Controls Pre	Maybe	
	Normal	0.17
Area 2 Controls Post	Y	
	Normal	0.43

Salinity, nekton sampling	Y/N?	p
Area 1 Pre	Maybe	
	Normal	0.21
Area 1 Post	N	<0.01
Area 1 Controls Pre	Y	
	Normal	0.55
Area 1 Controls Post	N	<0.01
Area 2 Pre	Y	
	Normal	0.69
Area 2 Post	Y	
	Normal	0.57
Area 2 Controls Pre	N	0.01
Area 2 Controls Post	N	0.04

DO, nekton sampling	Y/N?	p
Area 1 Pre	Y	
	Log-normal	0.38
Area 1 Post	N	<0.01
Area 1 Controls Pre	N	0.05
Area 1 Controls Post	N	<0.01
Area 2 Pre	Y	
	Log-normal	0.81
Area 2 Post	N	0.07
Area 2 Controls Pre	N	<0.01
Area 2 Controls Post	N	<0.01

### Mann-Whitney Rank-sum test

All mosquito transect data		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	166,462		1.72	0.043

Targeted data, no dry samples		U-statistic	Chi-squared approximation	p (df = 1)
Area 1 Pre	Area 1 Post	159,614	305	<0.001
Area 1 Pre	Area 1 Pre Controls	94,512.5	0.000	0.985
Area 1 Post	Area 1 Post Controls	2,219,180.5	384	<0.001
Area 1 Controls Pre	Area 1 Controls Post	575,971	10.9	0.001
Area 2 Pre	Area 2 Post	305,582	111	<0.001
Area 2 Pre	Area 2 Controls Pre	303,618.5	0.006	0.938
Area 2 Post	Area 2 Controls Post	1,737,225	193	<0.001
Area 2 Control Pre	Area 2 Controls Post	1,091,888.5	0.005	0.945

Larvae per event, targeted sampling		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Controls, Pre	124.5	82	0.06	0.48
Area 2 Pre	Area 2 Post	566		0.89	0.19
Area 2 Pre	Area 2 Pre Controls	819		0.57	0.28
Area 2 Control Pre	Area 2 Control Post	2,002.5		2.15	*

\*increased (contrary to hypothesis); significant under two-tailed test (p<0.05)

Sites with detected larvae per event, targeted sampling		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Controls, Pre	114	82	0.45	0.33
Area 2 Pre	Area 2 Post	560.5		0.95	0.17
Area 2 Pre	Area 2 Pre Controls	819		0.57	0.28

Phragmites cover, quadrat data		U-statistic	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	1,485	1.29	0.099

Phragmites cover where detected, quadrat data		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	75.5		3.33	<0.001
Area 2 Post	Area 2 Controls Post	55	36		

Vegetation Invertebrates: Arachnids		U-statistic	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	176.5	0.43	0.34
Area 1 Pre	Area 1 Pre Controls	149	1.53	0.063
Area 1 Post	Area 1 Controls Post	331	1.94	0.026
Area 1 Controls Pre	Area 1 Controls Post	74	4.62	<0.001

Vegetation Invertebrates: Insects		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	147.5		1.23	0.11
Area 1 Pre	Area 1 Controls	131.5		1.98	0.024
Area 1 Post	Area 1 Controls Post	335.5		1.88	0.030
Area 1 Controls Pre	Area 1 Controls Post	492.5		0.16	0.44
Area 2 Pre	Area 2 Controls Pre	252	~200	0.78	0.22
Area 2 Post	Area 2 Controls Post	102	~85	0.99	0.16
Area 2 Controls Pre	Area 2 Controls Post	496.5		0.14	0.44

Vegetation Invertebrates: Gastropods		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Controls Pre	190		0.47	0.32
Area 1 Post	Area 1 Controls Post	463		1.27	0.10
Area 1 Controls Pre	Area 1 Controls Post	403.5		1.39	0.083
Area 2 Pre	Area 2 Post	54.5	44	1.14	0.13
Area 2 Pre	Area 2 Controls Pre	117.5	~200	2.10	0.028
Area 2 Controls Pre	Area 2 Controls Post	403.5		1.39	0.083

Vegetation Invertebrates: Total Organisms			U-statistic	Z-score	p (one-tailed)
Area 1 Controls Pre	Area 1 Controls Post	386	1.62	0.054	
Area 2 Controls Pre	Area 2 Controls Post	411.5	1.28	0.10	

Water Column Invertebrates: Crustaceans		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	140.5	97	0.22	0.42
Area 1 Pre	Area 1 Controls Pre	176	~130	0.53	0.30
Area 1 Post	Area 1 Controls Post	382.5		0.71	0.24
Area 1 Controls Pre	Area 1 Controls Post	471.5		1.25	0.11
Area 2 Pre	Area 2 Post	124	97	0.77	0.22
Area 2 Pre	Area 2 Controls Pre	364		1.12	0.13
Area 2 Post	Area 2 Controls Post	127	~125	1.70	0.045
Area 2 Controls Pre	Area 2 Controls Post	560		0.08	0.47

Water Column Invertebrates: Insects		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	146	97	0.03	0.49
Area 1 Pre	Area 1 Controls Pre	175	~130	0.56	0.29
Area 1 Post	Area 1 Controls Post	343.5		1.29	0.10
Area 1 Controls Pre	Area 1 Controls Post	528.5		0.56	0.29
Area 2 Pre	Area 2 Post	107	97	1.35	0.088
Area 2 Pre	Area 2 Controls Pre	392		0.71	0.24
Area 2 Post	Area 2 Controls Post	66	~125	3.38	<0.001
Area 2 Controls Pre	Area 2 Controls Post	492		0.92	0.18

Water Column Invertebrates: Total Organisms		U-statistic	Critical Value (one-tailed test, $p < 0.05$ )	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	88	97	1.99	0.023
Area 1 Pre	Area 1 Controls Pre	172	~130	0.64	0.26
Area 1 Post	Area 1 Controls Post	314		1.73	0.041
Area 1 Controls Pre	Area 1 Controls Post	569.5		0.05	0.48

Benthic Invertebrates: Crustaceans		U-statistic	Critical Value (one-tailed test, $p < 0.05$ )	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	143	~125	0.13	0.45
Area 1 Pre	Area 1 Controls Pre	174.5	~190*	0.40	0.34
Area 1 Controls Pre	Area 1 Controls Post	542		0.59	0.28
Area 2 Pre	Area 2 Post	75	82	1.94	0.026
Area 2 Post	Area 2 Controls Post	139.5	~125	1.51	0.065
Area 2 Controls Pre	Area 2 Controls Post	448		1.54	0.062

\* judged to be not significant based on low Z-score approximation

Benthic Invertebrates: Insects		U-statistic	Critical Value (one-tailed test, $p < 0.05$ )	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	100.5	~125	1.57	0.058
Area 1 Pre	Area 1 Controls Pre	157	~190	0.88	0.19
Area 1 Controls Pre	Area 1 Controls Post	449.5		1.44	0.075
Area 2 Pre	Area 2 Post	118	82	0.30	0.38
Area 2 Pre	Area 2 Controls Pre	361		0.13	0.45
Area 2 Post	Area 2 Controls Post	155	~125	1.09	0.14
Area 2 Controls Pre	Area 2 Controls Post	488.5		1.04	0.15

Benthic Invertebrates: Polychaetes		U-statistic	Critical Value (one-tailed test, $p < 0.05$ )	Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	109	~125	1.28	0.10
Area 1 Pre	Area 1 Controls Pre	128	~190	1.68	0.046
Area 1 Post	Area 1 Controls Post	325		1.69	0.045
Area 1 Controls Pre	Area 1 Controls Post	453.5		1.40	0.081
Area 2 Pre	Area 2 Post	111.5	82	0.55	0.29
Area 2 Pre	Area 2 Controls Pre	283.5		1.41	0.079
Area 2 Controls Pre	Area 2 Controls Post	489.5		1.03	0.15

Benthic Invertebrates: Oligochaetes		U-statistic	Critical Value (one-tailed test, $p < 0.05$ )	Z-score	p (one-tailed)
Area 1 Controls Pre	Area 1 Controls Post	426		1.73	0.043
Area 2 Pre	Area 2 Post	98	82	1.06	0.15
Area 2 Controls Pre	Area 2 Controls Post	517.5		0.69	0.25

Benthic Invertebrates: Total Organisms		U-statistic	Critical Value (one-tailed test, $p < 0.05$ )	Z-score	P (one-tailed)
Area 1 Pre	Area 1 Post	126	~125	0.71	0.24
Area 1 Pre	Area 1 Controls Pre	116.5	~190	1.99	0.023
Area 1 Post	Area 1 Controls Post	319.5		1.77	0.038
Area 1 Controls Pre	Area 1 Controls Post	478.5		1.09	0.14
Area 2 Pre	Area 2 Post	122	82	0.15	0.44
Area 2 Pre	Area 2 Controls Pre	241		2.11	0.017
Area 2 Post	Area 2 Controls Post	112	~125	2.24	0.012
Area 2 Controls Pre	Area 2 Controls Post	455.5		1.45	0.073

Sediment Accumulation		U-statistic	Critical Value (one-tailed test, p<0.05)	Z-score	p (one-tailed)
Area 1 2004	Area 1 2007	7.5	24		
Area 1 2004	Controls 2004	46	42	-1.47	0.071
Area 1 2007	Controls 2007	74.5	58	0.94	0.17
Area 2 2004	Area 2 2007	33.5	19		
Area 2 2004	Controls 2004	45.5	30		
Area 2 2007	Controls 2007	74.5	58	-1.29	0.099
Controls 2004	Controls 2007	113	109	-1.29	0.099

2003 Ditch Salinity Survey		U-statistic	Z-score	p (one-tailed)
Area 3	Area 4	1,210	1.48	0.069

### Binomial distribution Z-scores

Dry transect station percents		Z-score	p (two-tailed)
Area 1 Pre	Area 1 Post	-4.53	<0.001
Area 1 Pre	Area 1 Pre Controls	-2.02	0.045
Area 1 Post	Area 1 Post Controls	3.24	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.12	0.956
Area 2 Pre	Area 2 Post	2.90	0.018
Area 2 Pre	Area 2 Controls Pre	-1.87	0.063
Area 2 Post	Area 2 Controls Post	-4.29	<0.001
Area 2 Controls Pre	Area 2 Controls Post	0.491	0.376

Transect stations positive for larvae		Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	5.39	<0.001
Area 1 Pre	Area 1 Pre Controls	0.46	0.366
Area 1 Post	Area 1 Post Controls	-5.66	<0.001
Area 1 Controls Pre	Area 1 Controls Post	-0.92	*
Area 2 Pre	Area 2 Post	0.21	0.417
Area 2 Pre	Area 2 Controls Pre	-0.89	0.187
Area 2 Post	Area 2 Controls Post	-2.28	0.011
Area 2 Controls Pre	Area 2 Controls Post	-1.76	*

\*increased (contrary to hypothesis); not significant under two-tailed test

Transect stations positive for larvae, no dry stations		Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	4.60	<0.001
Area 1 Pre	Area 1 Pre Controls	0.08	0.468
Area 1 Post	Area 1 Post Controls	-5.20	<0.001
Area 1 Controls Pre	Area 1 Controls Post	-0.92	*
Area 2 Pre	Area 2 Post	0.72	0.236
Area 2 Pre	Area 2 Controls Pre	-1.41	0.071
Area 2 Post	Area 2 Controls Post	-3.29	<0.001
Area 2 Controls Pre	Area 2 Controls Post	-1.65	*

\*increased (contrary to hypothesis); not significant under two-tailed test

Percentage targeted sampling stations positive for larvae (dry stations discounted)		Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	17.1	<0.001
Area 1 Pre	Area 1 Pre Controls	0.42	0.337
Area 1 Post	Area 1 Post Controls	-19.7	<0.001
Area 1 Controls Pre	Area 1 Controls Post	1.62	0.053
Area 2 Pre	Area 2 Post	10.3	<0.001
Area 2 Pre	Area 2 Controls Pre	-0.56	0.288
Area 2 Post	Area 2 Controls Post	-14.3	<0.001
Area 2 Controls Pre	Area 2 Controls Post	-0.32	*

\*increased (contrary to hypothesis); not significant under two-tailed test

Bare ground, quadrat frequency data		Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	5.08	<0.001
Area 1 Pre	Area 1 Pre Controls	4.05	<0.001
Area 1 Post	Area 1 Post Controls	3.44	<0.001
Area 1 Controls Pre	Area 1 Controls Post	4.99	<0.001
Area 2 Pre	Area 2 Post	-2.61	0.004
Area 2 Pre	Area 2 Controls Pre	0.51	0.32
Area 2 Post	Area 2 Controls Post	2.94	0.002
Area 2 Controls Pre	Area 2 Controls Post	-0.22	0.41

Phragmites, quadrat frequency data		Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	0.63	0.26
Area 1 Pre	Area 1 Pre Controls	0.58	0.29
Area 1 Post	Area 1 Post Controls	0.65	0.26
Area 1 Controls Pre	Area 1 Controls Post	0.76	0.22
Area 2 Pre	Area 2 Post	1.17	0.12
Area 2 Pre	Area 2 Controls Pre	-1.51	0.065
Area 2 Post	Area 2 Controls Post	1.99	0.023
Area 2 Controls Pre	Area 2 Controls Post	0.50	0.31

Schoenoplectus pungens, quadrat frequency data		Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	1.58	0.057
Area 1 Pre	Area 1 Pre Controls	5.27	<0.001
Area 1 Post	Area 1 Post Controls	4.76	<0.001
Area 1 Controls Pre	Area 1 Controls Post	0.19	0.425

S. patens, quadrat frequency data		Z-score	p (one-tailed)
Area 1 Pre	Area 1 Post	-1.42	0.078
Area 1 Pre	Area 1 Pre Controls	-1.18	0.12
Area 1 Post	Area 1 Post Controls	0.74	0.23
Area 1 Controls Pre	Area 1 Controls Post	0.44	0.33
Area 2 Pre	Area 2 Post	1.69	0.045
Area 2 Pre	Area 2 Controls Pre	1.38	0.084
Area 2 Post	Area 2 Controls Post	0.89	0.19
Area 2 Controls Pre	Area 2 Controls Post	-0.44	0.33

### Student t-tests

Bare ground cover where detected, quadrat data		t-statistic	Degrees freedom	p (one-tailed)
Area 2 Post	Area 2 Controls Post	6.75	29	<0.001

Bare ground cover where detected, quadrat data (log-transformed)		t-statistic	Degrees freedom	p (one-tailed)
Area 1 Post	Area 1 Post Controls	-1.62	35	0.055
Area 1 Controls Pre	Area 1 Controls Post	-1.85	46	0.071
Area 2 Pre	Area 2 Controls Pre	0.83	55	0.21
Area 2 Control Pre	Area 2 Controls Post	-1.24	32	0.11

Phragmites ground cover where detected, quadrat data		t-statistic	Degrees freedom	p (one-tailed)
Area 2 Pre	Area 2 Controls Pre	1.06	50	0.15

Aboveground Biomass		t-statistic	Degrees freedom	p (one-tailed)
Area 2 Post	Area 2 Controls Post	-14.0	65	<0.001

Aboveground Biomass (log-transformed)		t-statistic	Degrees freedom	p (one-tailed)
Area 1 Pre	Area 1 Post	-1.31	61	0.10

Above- and below-ground Biomass (log-transformed)		t-statistic	Degrees freedom	p (one-tailed)
Area 1 Pre	Area 1 Post	-1.37	28	0.091
Area 1 Pre	Area 1 Pre Controls	0.93	32	0.18
Area 1 Post	Area 1 Post Controls	-1.94	45	0.030
Area 1 Post	Area 1 Post Controls*	0.37	37	0.35
Area 1 Controls Pre	Area 1 Controls Post	4.33	49	<0.001
Area 1 Controls Pre	Area 1 Controls Post*	3.03	41	0.002

\*2007 data removed

Vegetation Invertebrates: Arachnids		t-statistic	Degrees freedom	p
Area 2 Pre	Area 2 Post	3.16	23	0.002

Vegetation Invertebrates: Insects		t-statistic	Degrees freedom	p
Area 2 Pre	Area 2 Post	0.28	23	0.78

Vegetation Invertebrates: Total Organisms (log-transformed)		t-statistic	Degrees freedom	p
Area 1 Pre	Area 1 Post	2.85	38	0.004

Vegetation Invertebrates: Total Organisms		t-statistic	Degrees freedom	p
Area 1 Pre	Area 1 Pre Controls	2.59	40	0.007

Temperature, Nekton Sampling		t-statistic	Degrees freedom	p (one-tailed)
Area 1 Post	Area 1 Controls Post	2.69	225	0.003
Area 2 Post	Area 2 Control Post	-2.16	167	0.016
Area 2 Control Pre	Area 2 Control Post	-4.39	234	<0.001

Temperature, Nekton Sampling, log-transformed		t-statistic	Degrees freedom	p (one-tailed)
Area 1 Pre	Area 1 Controls Pre	-0.59	112	0.28