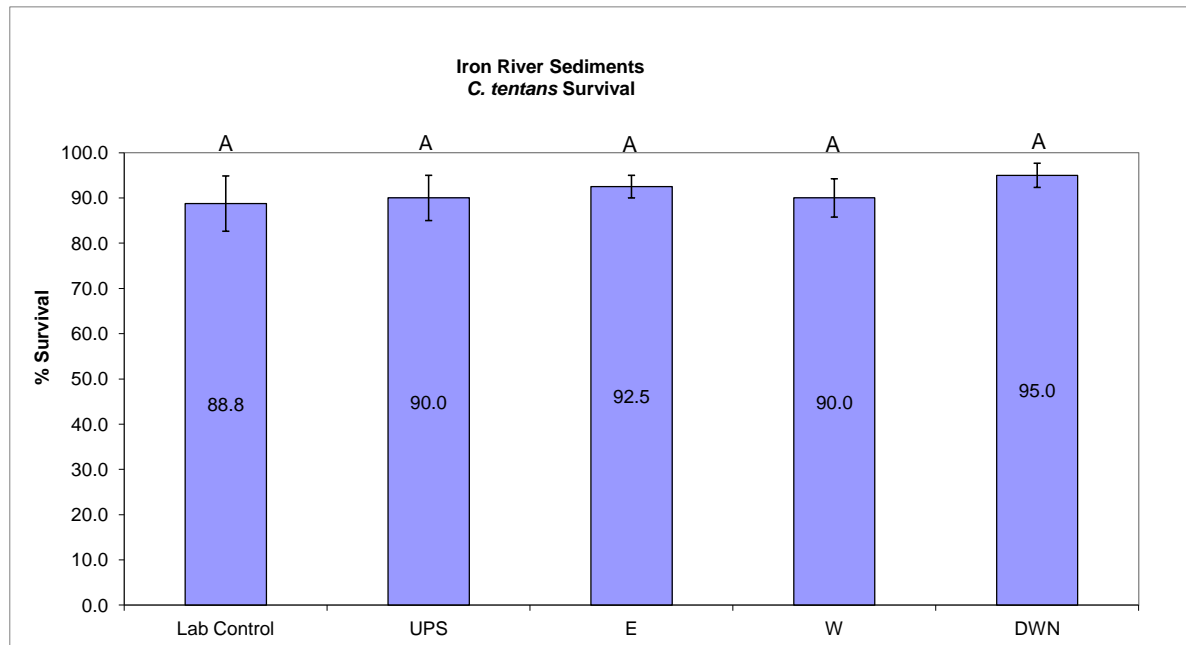


Figure 1
Iron River at Tri-County Recreation Corridor Sediments 2013
***Chironomus tentans* Survival**
Sediment collected: May 13, 2013
Test Date: May 20, 2013

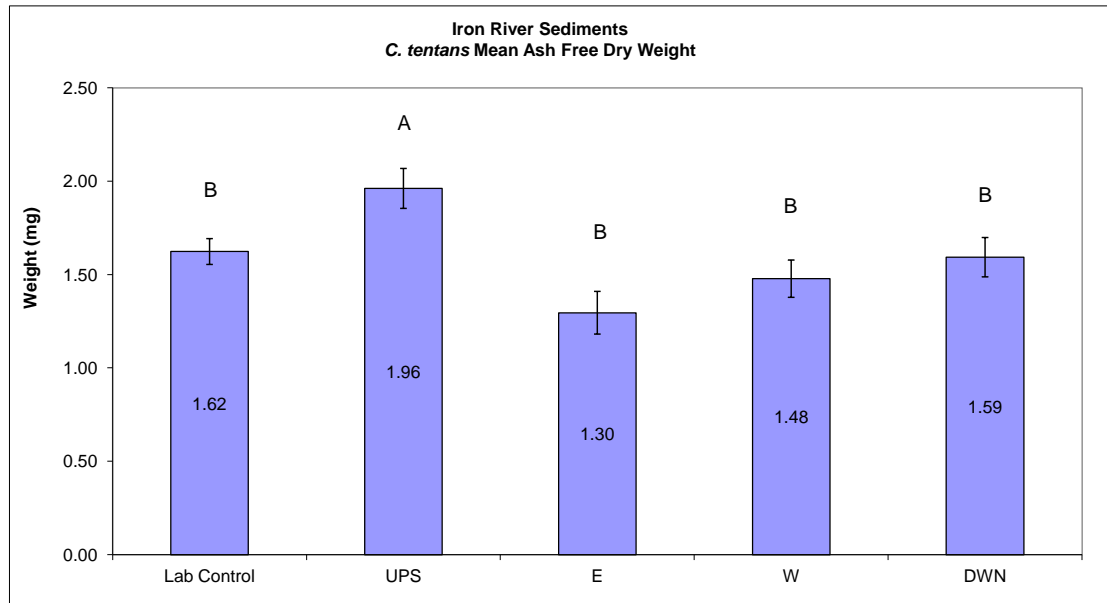
Percent survival by replicate												
Lab Number	Site Name	Description	Rep 1	2	3	4	5	6	7	8	Mean	SE
LC	Lab Control	synthetic sediment	80	50	100	100	90	100	90	100	88.8	6.1
FX000493	UPS	Upstream	100	70	100	100	100	80	100	70	90.0	5.0
FX000494	E	Under Bridge East Bank	90	100	90	90	100	90	100	80	92.5	2.5
FX000495	W	Under Bridge West Bank	90	80	100	100	100	80	70	100	90.0	4.2
FX000496	DWN	Downstream First Wing Deflector	90	100	100	100	80	100	100	90	95.0	2.7



Bars with the same letter are not statistically different

Figure 2
Iron River at Tri-County Recreation Corridor Sediments 2013
***Chironomus tentans* Ash Free Dry Weight (AFDW)**
Sediment collected: May 13, 2013
Test Date: May 20, 2012

Lab Number	Site Name	Description	mg/surviving individual								Mean	SE
			Rep 1	2	3	4	5	6	7	8		
LC	Lab Control	synthetic sediment	1.88	1.80	1.70	1.79	1.49	1.33	1.54	1.46	1.62	0.07
FX000493	UPS	Upstream	1.76	1.86	1.79	2.22	1.83	2.47	1.56	2.19	1.96	0.11
FX000494	E	Under Bridge East Bank	1.31	1.05	1.05	0.74	1.47	1.64	1.67	1.43	1.30	0.11
FX000495	W	Under Bridge West Bank	1.42	1.06	1.70	1.24	1.32	1.96	1.53	1.60	1.48	0.10
FX000496	DWN	Downstream First Wing Deflector	1.91	1.97	1.57	1.76	1.69	1.22	1.16	1.47	1.59	0.11



Bars with the same letter are not statistically different

Figure 3
Iron River at Tri-County Recreation Corridor Sediments 2013
Chironomus tentans
Dissolved Oxygen (mg/L)

Lab Number	Site Name	Description	Initial	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Mean	sd
LC	Lab Control	synthetic sediment	6.53	5.22	5.57	5.61	5.55	5.65	5.20	3.90	4.02	3.51	4.50	4.87	0.92
FX000493	UPS	Upstream	5.64	5.24	5.84	5.13	5.29	5.85	4.35	2.84	2.77	2.88	4.00	4.42	1.23
FX000494	E	Under Bridge East Bank	7.08	4.78	4.73	4.19	3.35	4.34	2.83	2.55	2.19	2.60	3.32	3.49	1.41
FX000495	W	Under Bridge West Bank	5.17	4.88	5.11	4.96	4.29	4.19	3.13	3.05	3.73	3.45	3.07	3.99	0.85
FX000496	DWN	Downstream First Wing Deflector	6.08	4.92	5.08	4.89	5.03	5.15	4.78	4.08	3.54	4.42	3.82	4.57	0.71

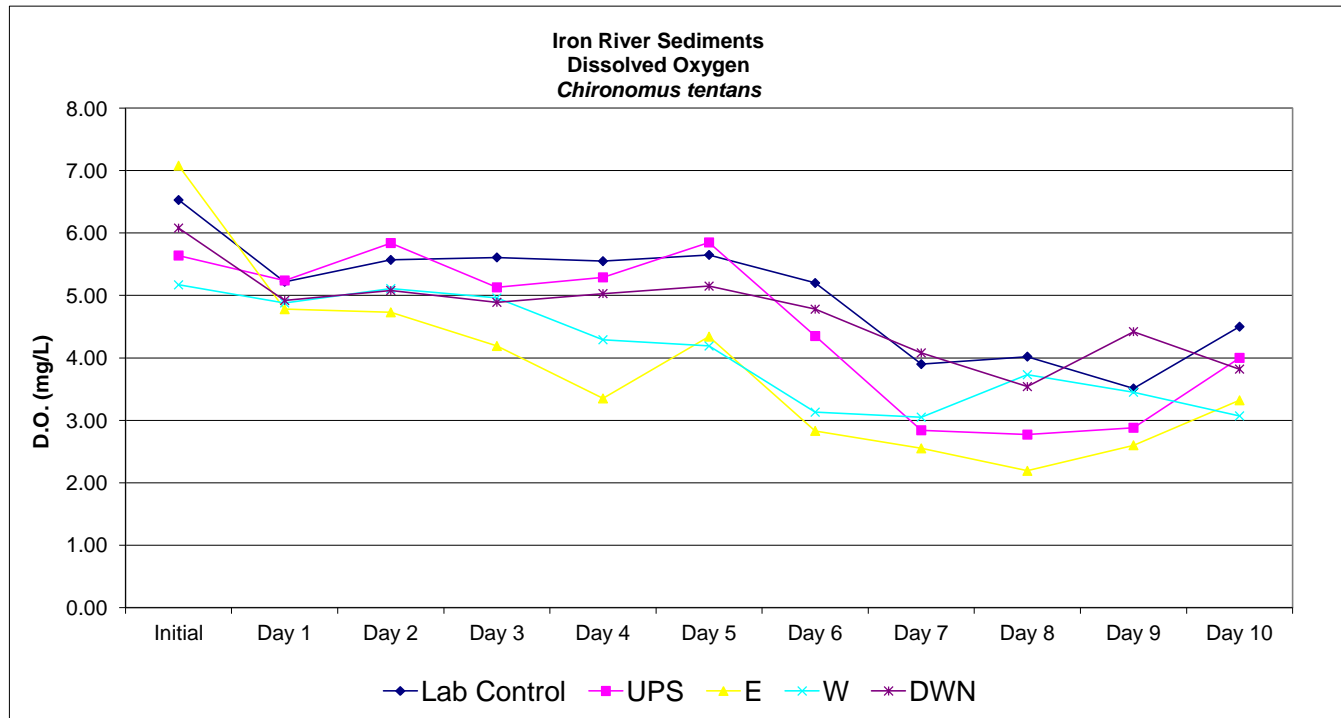


Figure 4
Iron River at Tri-County Recreation Corridor Sediments 2013
Chironomus tentans
pH

Lab Number	Site Name	Description	Initial	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Mean	sd
LC	Lab Control	synthetic sediment	8.39	8.16	8.21	8.30	8.33	8.27	8.27	8.19	8.20	8.09	8.24	8.23	0.08
FX000493	UPS	Upstream	8.21	8.18	8.35	8.35	8.39	8.36	8.25	8.11	8.11	8.09	8.21	8.24	0.11
FX000494	E	Under Bridge East Bank	8.30	8.16	8.28	8.26	8.21	8.22	8.09	8.06	8.07	8.08	8.11	8.15	0.09
FX000495	W	Under Bridge West Bank	8.22	8.09	8.21	8.29	8.26	8.21	8.14	8.13	8.15	8.10	8.08	8.17	0.07
FX000496	DWN	Downstream First Wing Deflector	8.33	8.17	8.29	8.30	8.32	8.26	8.22	8.10	8.11	8.14	8.14	8.21	0.09

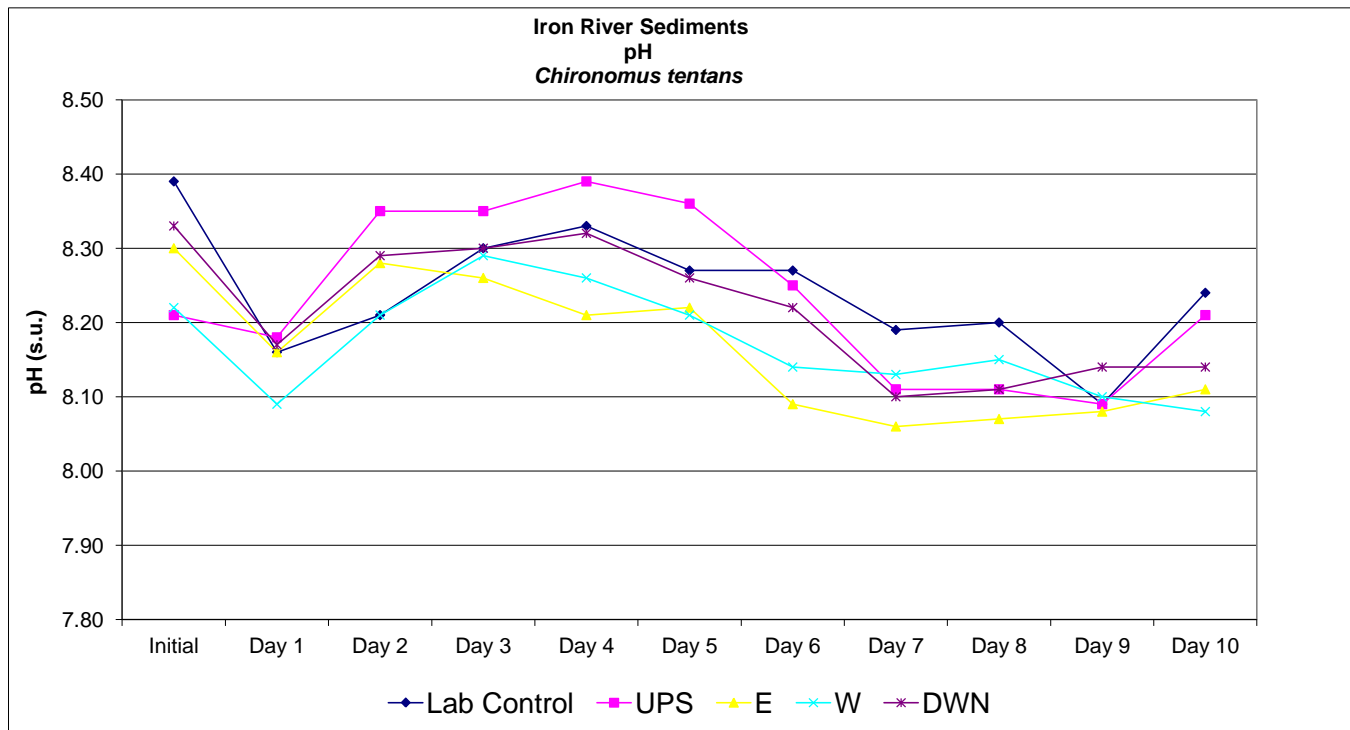


Figure 5
Iron River at Tri-County Recreation Corridor Sediments 2013
Chironomus tentans
Temperatures (°C)

Lab Number	Site Name	Description	Initial	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Mean	sd
LC	Lab Control	synthetic sediment	23.1	23.0	22.9	23.3	23.1	22.8	22.7	22.8	23.0	22.8	23.3	23.0	0.2
FX000493	UPS	Upstream	23.7	23.3	23.2	23.8	23.4	23.5	23.2	23.5	23.5	23.5	23.8	23.5	0.2
FX000494	E	Under Bridge East Bank	22.9	22.7	22.7	23.3	23.0	22.6	22.6	22.5	22.9	22.7	23.2	22.8	0.3
FX000495	W	Under Bridge West Bank	23.5	23.1	23.1	23.5	23.2	23.1	22.9	23.2	23.2	23.2	23.5	23.2	0.2
FX000496	DWN	Downstream First Wing Deflector	23.5	23.1	23.1	23.6	23.3	23.3	23.2	23.3	23.4	23.3	23.7	23.3	0.2

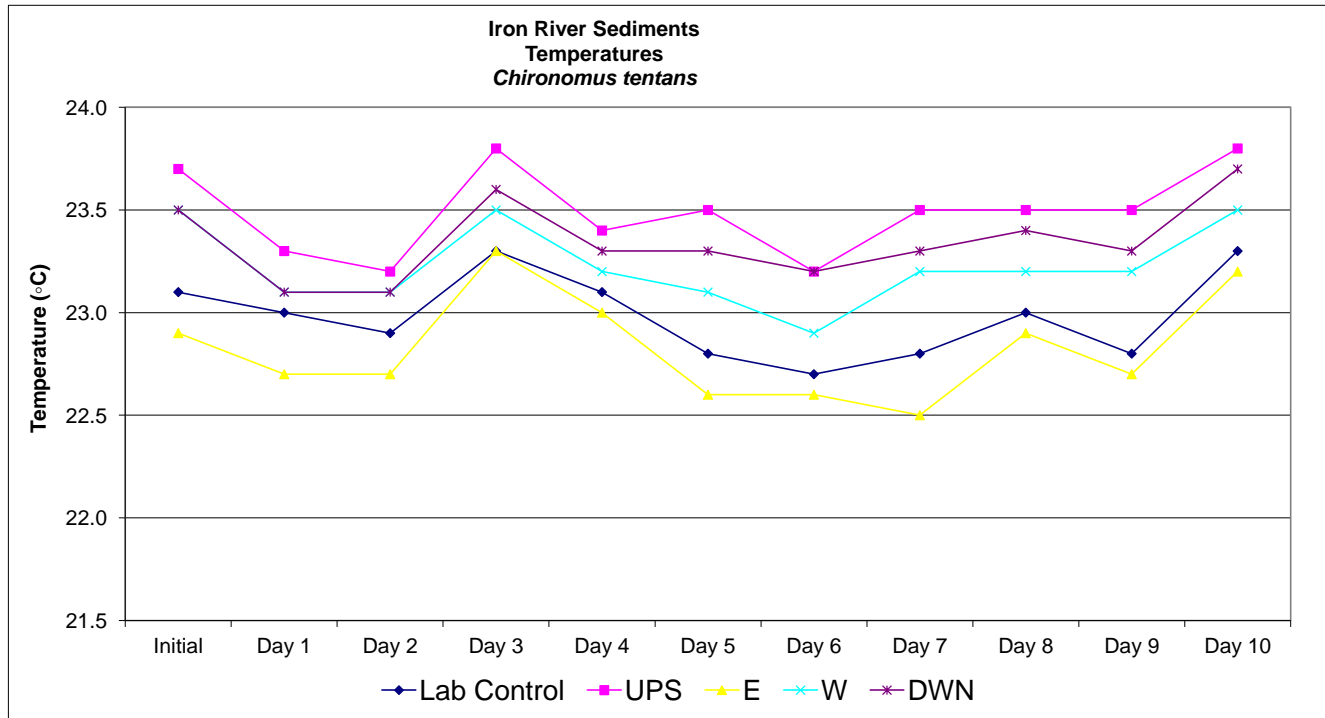
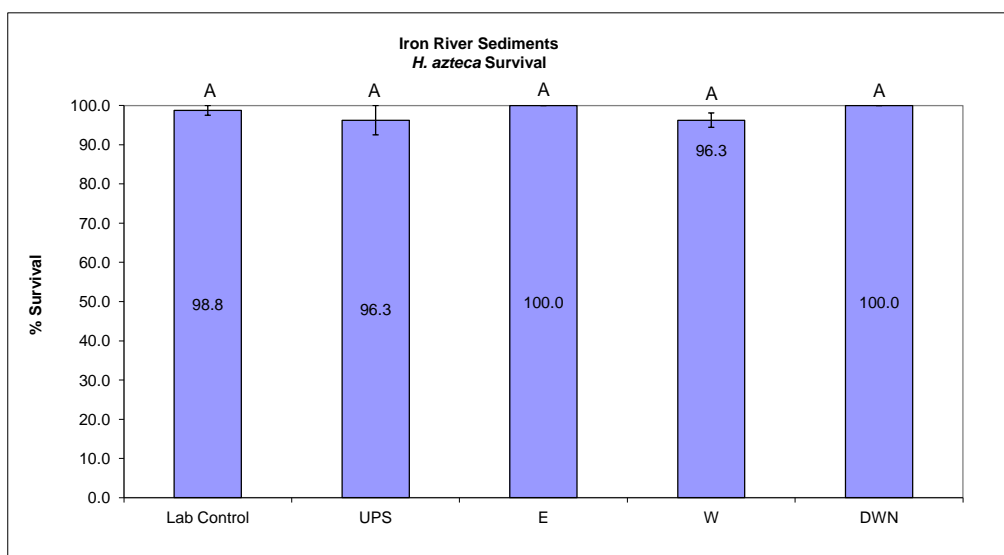


Figure 6
Iron River at Tri-County Recreation Corridor Sediments 2013
Chironomus tentans
Conductivity, Hardness, Alkalinity and Ammonia

Lab Number	Site Name	Description	Conductivity (μ S)		Hardness (mg/L)		Alkalinity (mg/L)		Ammonia (mg/L)	
			Initial (day 0)	Final (day 10)	Initial (day 0)	Final (day 10)	Initial (day 0)	Final (day 10)	Initial (day 0)	Final (day 10)
LC	Lab Control	synthetic sediment	631	651	200	252	290	300	0.124	1.600
FX000493	UPS	Upstream	501	681	176	236	260	325	0.122	1.690
FX000494	E	Under Bridge East Bank	512	675	184	220	270	340	0.257	1.750
FX000495	W	Under Bridge West Bank	528	652	176	208	260	315	0.231	2.350
FX000496	DWN	Downstream First Wing Deflector	488	648	180	192	255	340	0.172	0.448

Figure 7
Iron River at Tri-County Recreation Corridor Sediments
Hyallolela azteca Survival
 Sediment collected: May 13, 2013
 Test Date: May 20, 2013

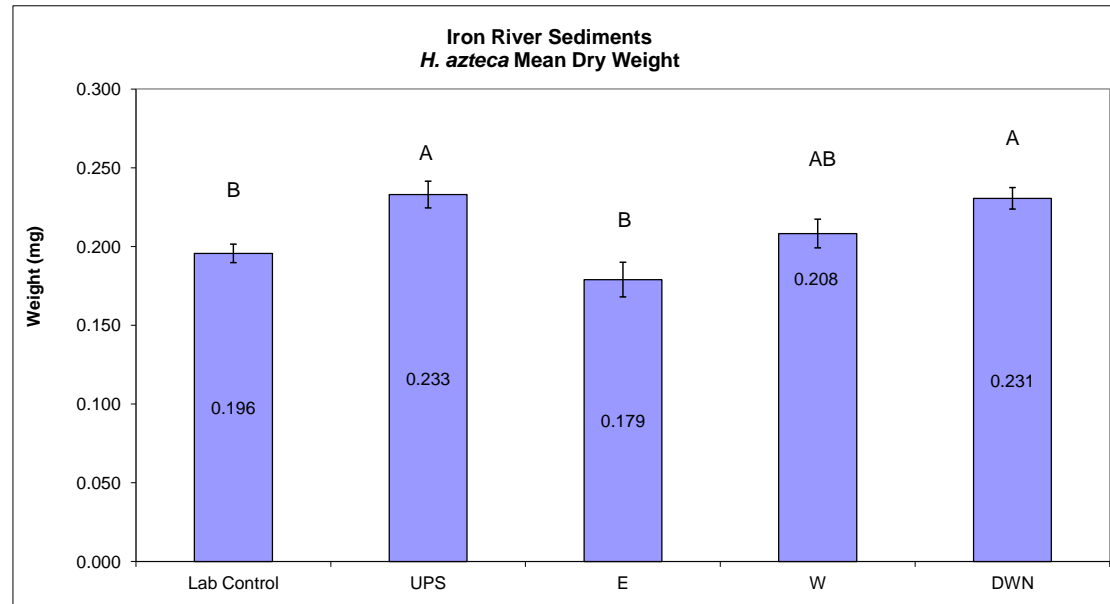
Percent survival by replicate												
Lab Number	Site Name	Description	Rep 1	2	3	4	5	6	7	8	Mean	SE
LC	Lab Control	synthetic sediment	90	100	100	100	100	100	100	100	98.8	1.3
FX000493	UPS	Upstream	70	100	100	100	100	100	100	100	96.3	3.8
FX000494	E	Under Bridge East Bank	100	100	100	100	100	100	100	100	100.0	0.0
FX000495	W	Under Bridge West Bank	100	100	100	90	90	100	90	100	96.3	1.8
FX000496	DWN	Downstream First Wing Deflector	100	100	100	100	100	100	100	100	100.0	0.0



Bars with the same letter are not statistically different

Figure 8
Iron River at Tri-County Recreation Corridor Sediments 2013
Hyalella azteca Dry Weight/Surviving Individual (mg)
 Sediment collected: May 13, 2013
 Test Date: May 20, 2013

Lab Number	Site Name	Description	mg/surviving individual								Mean	SE
			Rep 1	2	3	4	5	6	7	8		
LC	Lab Control	synthetic sediment	0.201	0.206	0.218	0.209	0.198	0.184	0.168	0.181	0.196	0.01
FX000493	UPS	Upstream	0.240	0.227	0.222	0.219	0.280	0.197	0.234	0.245	0.233	0.01
FX000494	E	Under Bridge East Bank	0.230	0.143	0.158	0.203	0.171	0.177	0.205	0.145	0.179	0.01
FX000495	W	Under Bridge West Bank	0.199	0.188	0.228	0.203	0.209	0.165	0.248	0.226	0.208	0.01
FX000496	DWN	Downstream First Wing Deflector	0.239	0.229	0.221	0.242	0.252	0.198	0.252	0.212	0.231	0.01



Bars with the same letter are not statistically different

Figure 9
Iron River at Tri-County Recreation Corridor Sediments 2013
Hyalella azteca
Dissolved Oxygen (mg/L)

Lab Number	Site Name	Description	Initial	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Mean	sd
LC	Lab Control	synthetic sediment	6.59	6.41	6.79	6.68	6.56	6.55	6.24	6.18	5.96	6.30	6.68	6.44	0.25
FX000493	UPS	Upstream	6.15	6.08	6.30	6.07	5.99	6.05	5.79	5.55	5.75	6.15	6.49	6.02	0.26
FX000494	E	Under Bridge East Bank	5.79	5.36	5.27	5.06	5.12	5.14	5.12	4.67	4.55	5.09	5.07	5.05	0.33
FX000495	W	Under Bridge West Bank	5.12	5.12	5.56	5.59	5.34	5.63	5.41	5.10	5.23	5.44	5.44	5.39	0.20
FX000496	DWN	Downstream First Wing Deflector	5.86	5.49	5.52	5.55	5.88	5.75	5.50	5.53	5.59	5.78	5.63	5.62	0.15

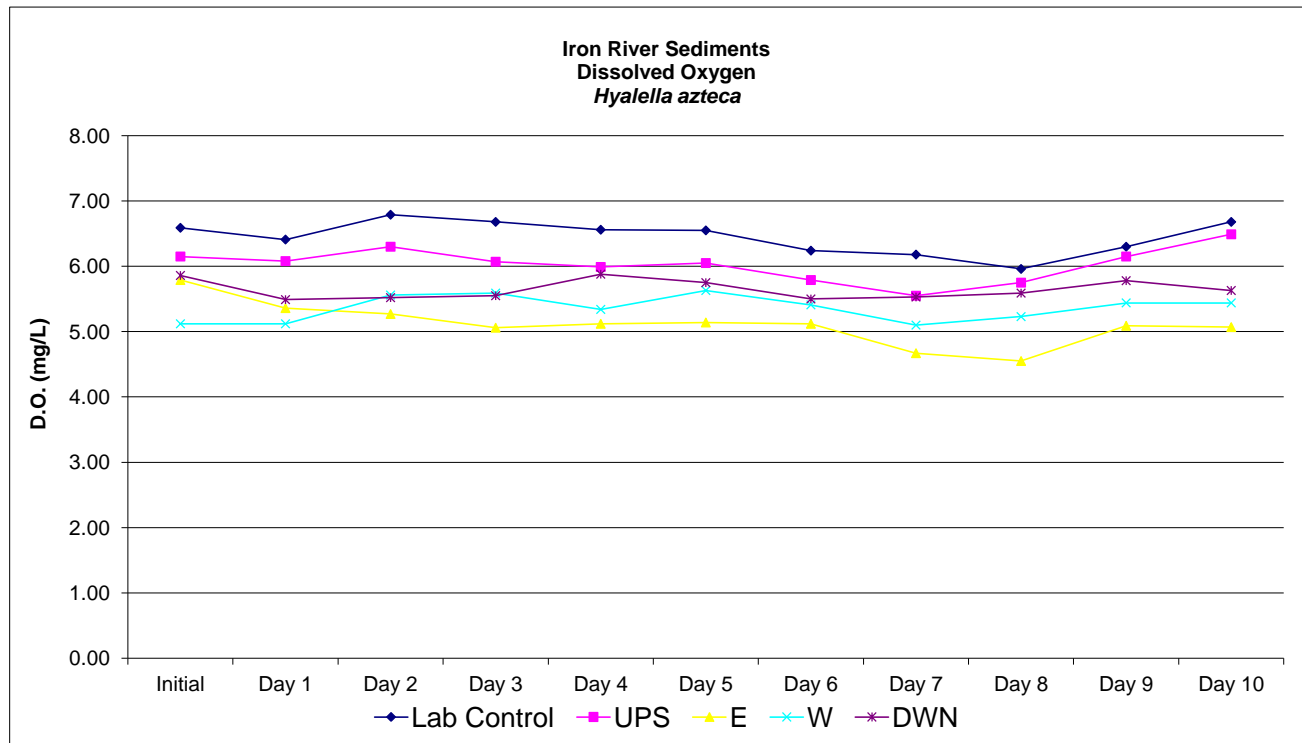


Figure 10
Iron River at Tri-County Recreation Corridor Sediments 2013
Hyalella azteca
pH

Lab Number	Site Name	Description	Initial	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Mean	sd
LC	Lab Control	synthetic sediment	8.46	8.39	8.45	8.47	8.43	8.38	8.37	8.35	8.38	8.36	8.37	8.39	0.04
FX000493	UPS	Upstream	8.31	8.35	8.48	8.49	8.50	8.44	8.41	8.38	8.42	8.43	8.43	8.43	0.06
FX000494	E	Under Bridge East Bank	8.31	8.29	8.36	8.37	8.36	8.32	8.30	8.24	8.22	8.24	8.20	8.29	0.06
FX000495	W	Under Bridge West Bank	8.19	8.14	8.25	8.34	8.37	8.36	8.33	8.30	8.33	8.29	8.28	8.30	0.07
FX000496	DWN	Downstream First Wing Deflector	8.34	8.25	8.34	8.41	8.42	8.36	8.33	8.31	8.35	8.38	8.33	8.35	0.05

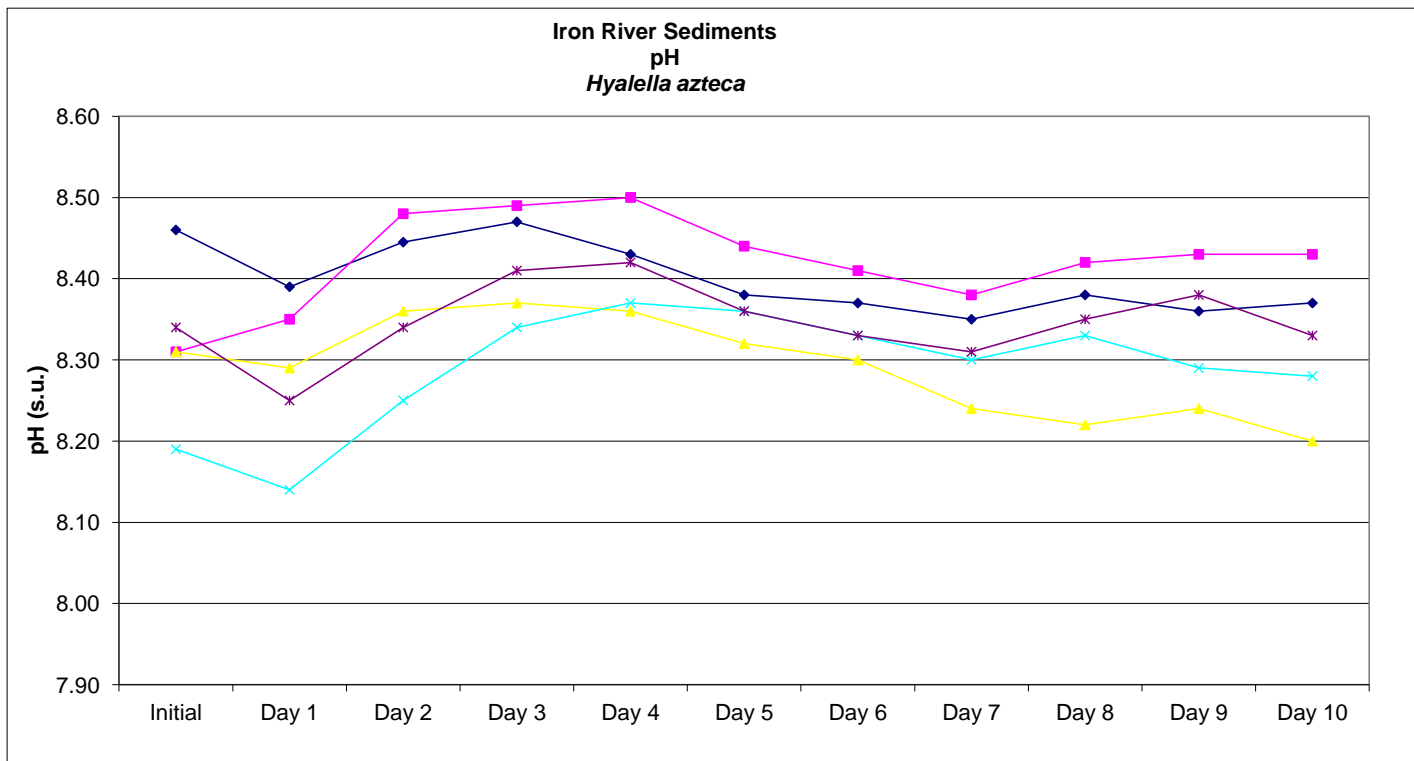


Figure 11
Iron River at Tri-County Recreation Corridor Sediments 2013
Hyaella azteca
Temperatures (°C)

Lab Number	Site Name	Description	Initial	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Mean	sd
LC	Lab Control	synthetic sediment	23.3	23.0	23.0	23.3	23.0	22.9	23.2	22.9	23.1	22.9	23.3	23.1	0.2
FX000493	UPS	Upstream	23.4	23.2	23.0	23.4	23.1	23.0	23.2	23.0	23.1	23.0	23.4	23.1	0.2
FX000494	E	Under Bridge East Bank	23.1	23.1	23.0	23.3	23.1	22.8	23.1	22.8	23.1	22.8	23.3	23.0	0.2
FX000495	W	Under Bridge West Bank	23.3	23.2	23.1	23.3	23.1	23.0	23.2	23.0	23.2	23.0	23.3	23.1	0.1
FX000496	DWN	Downstream First Wing Deflector	23.1	23.1	23.0	23.3	23.0	22.9	23.1	22.8	23.0	22.9	23.3	23.0	0.2

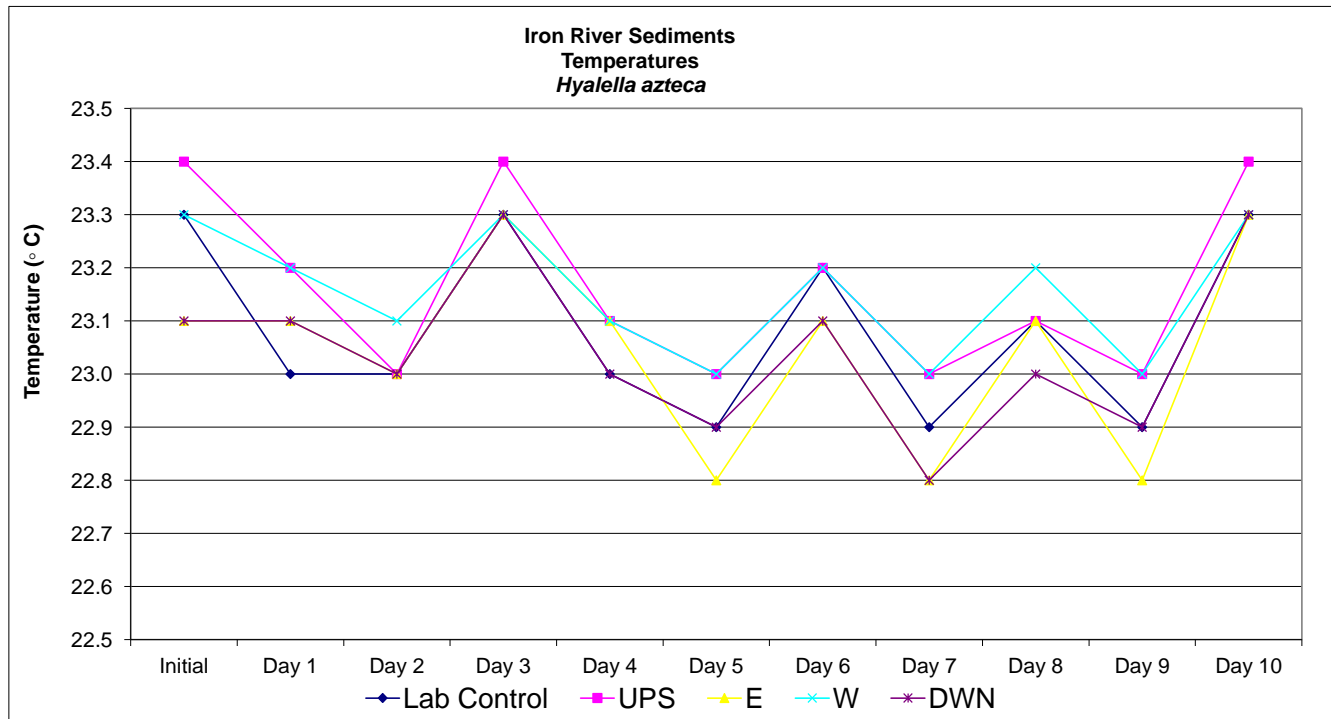


Figure 12
Iron River at Tri-County Recreation Corridor Sediments 2013
Hyalella azteca
Conductivity, Hardness, Alkalinity and Ammonia

Lab Number	Site Name	Description	Conductivity (μS)		Hardness (mg/L)		Alkalinity (mg/L)		Ammonia (mg/L)	
			Initial (day 0)	Final (day 10)	Initial (day 0)	Final (day 10)	Initial (day 0)	Final (day 10)	Initial (day 0)	Final (day 10)
LC	Lab Control	synthetic sediment	637	690	200	220	290	275	0.124	0.111
FX000493	UPS	Upstream	522	671	176	208	260	305	0.122	0.106
FX000494	E	Under Bridge East Bank	532	685	184	236	270	320	0.257	0.785
FX000495	W	Under Bridge West Bank	543	640	176	212	260	310	0.231	0.160
FX000496	DWN	Downstream First Wing Deflector	516	640	180	212	255	300	0.172	0.111