

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
Event 1 – February 2012								
Dutch Kills								
2/12/2012	DK001SW	0.5	13882	10.76	13.42	4.88	3.6	7.84
2/12/2012	DK001SW	1.5	13886	10.75	13.43	4.86	3.9	7.84
2/12/2012	DK001SW	2.5	13885	10.74	13.42	4.88	3.8	7.84
2/12/2012	DK001SW	3.5	13888	10.75	13.43	4.86	3.9	7.84
2/12/2012	DK001SW	4.5	14071	10.85	13.6	4.91	4.9	7.87
2/12/2012	DK001SW	5.5	14109	11	13.64	4.91	5.1	7.89
2/12/2012	DK001SW	6.5	14130	11.06	13.66	4.91	5	7.9
2/12/2012	DK001SW	7.5	14131	11.08	13.66	4.91	5	7.9
2/12/2012	DK001SW	8.5	14149	11.14	13.68	4.92	5.1	7.91
2/12/2012	DK001SW	9.5	14231	11.22	13.77	4.91	5.6	7.92
2/12/2012	DK001SW	10.5	14289	11.3	13.83	4.91	5.9	7.93
2/12/2012	DK001SW	11.5	14274	11.36	13.81	4.91	5.9	7.94
2/12/2012	DK001SW	12.5	14269	11.38	13.81	4.91	6.1	7.94
2/12/2012	DK001SW	13.5	14330	11.42	13.88	4.9	6.3	7.95
2/12/2012	DK001SW	14.5	14342	11.46	13.89	4.9	6.8	7.95
2/12/2012	DK001SW	15.5	14336	11.47	13.88	4.91	7.4	7.95
2/12/2012	DK001SW	16.5	14349	11.48	13.9	4.9	6.4	7.96
2/7/2012	DK011SW	0.5	11912	7.43	10.87	6.4	5.4	7.43
2/7/2012	DK011SW	1.5	12299	7.42	11.28	6.32	5.1	7.42
2/7/2012	DK011SW	2.5	12758	7.77	11.8	6.12	5.2	7.41
2/7/2012	DK011SW	3.5	12942	7.34	12	6.07	4.8	7.41
2/7/2012	DK011SW	4.5	12995	4.41	12	6.13	5.3	7.39
2/7/2012	DK011SW	5.5	13236	4.33	12.31	6.05	7.3	7.27
2/7/2012	DK011SW	6.5	13368	6.87	12.5	5.88	6.5	7.3
2/7/2012	DK011SW	7.5	13375	6.16	12.51	5.88	17.5	7.41
2/7/2012	DK011SW	8.5	13415	6.08	12.56	5.86	8.3	7.4
2/7/2012	DK011SW	9.5	13436	6.36	12.58	5.86	6.8	7.42
2/7/2012	DK011SW	10.5	13467	6.8	12.62	5.83	7.5	7.45
East Branch								
2/10/2012	EB010SW	0.5	11462	1.84	10.53	6.06	29.7	7.2
2/10/2012	EB010SW	1.5	12354	1.9	11.4	6.11	22.2	7.2
2/10/2012	EB010SW	2.5	12769	3.23	11.85	6	9.1	7.25
2/10/2012	EB010SW	3.5	12873	4.67	11.99	5.91	4.3	7.32
2/10/2012	EB010SW	4.5	12914	5	12.03	5.92	24.5	7.35
English Kills								
2/12/2012	EK006SW	0.5	13067	9.56	12.7	4.53	2.9	7.67
2/12/2012	EK006SW	1.5	13070	9.56	12.7	4.54	2.9	7.67
2/12/2012	EK006SW	2.5	13073	9.5	12.7	4.54	3	7.67
2/12/2012	EK006SW	3.5	13071	9.55	12.7	4.54	2.9	7.67

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2/12/2012	EK006SW	4.5	13071	9.5	12.7	4.54	2.9	7.67
2/12/2012	EK006SW	5.5	13076	9.54	12.71	4.53	3.3	7.67
2/12/2012	EK006SW	6.5	13161	9.52	12.77	4.61	3.6	7.67
2/12/2012	EK006SW	7.5	13160	9.51	12.76	4.63	3.1	7.68
2/12/2012	EK006SW	8.5	13170	9.51	12.76	4.65	2.9	7.68
2/12/2012	EK006SW	9.5	13380	9.38	12.88	4.92	2.7	7.68
2/12/2012	EK006SW	10.5	13420	9.32	12.95	4.85	2.7	7.68
2/12/2012	EK006SW	11.5	13482	9.28	12.92	5.07	2.7	7.68
2/12/2012	EK006SW	12.5	13479	9.27	12.94	5.03	2.6	7.68
2/12/2012	EK006SW	13.5	13570	9.25	13	5.11	2.7	7.68
2/12/2012	EK006SW	14.5	13596	9.22	13	5.18	2.8	7.68
2/12/2012	EK006SW	15.5	13625	9.16	13.01	5.22	2.7	7.68
2/12/2012	EK006SW	16.5	13638	8.91	12.97	5.37	3	7.67
2/12/2012	EK006SW	17.5	13639	8.86	12.97	5.36	2.9	7.66
2/12/2012	EK006SW	18.5	13665	8.63	12.94	5.52	2.9	7.65
2/8/2012	EK014SW	0.5	12276	8.83	11.73	4.93	3.6	7.54
2/8/2012	EK014SW	1.5	12277	8.86	11.72	4.95	3.5	7.53
2/8/2012	EK014SW	2.5	12281	8.82	11.72	4.97	3.7	7.53
2/8/2012	EK014SW	3.5	12330	8.68	11.66	5.29	3.9	7.52
2/8/2012	EK014SW	4.5	12406	8.39	11.72	5.34	3.9	7.52
2/8/2012	EK014SW	5.5	12460	8.29	11.68	5.59	4	7.51
2/8/2012	EK022SW	0.5	10580	8.51	9.98	4.94	10.6	7.55
2/8/2012	EK022SW	1.5	11586	7.91	10.96	5.1	7.9	7.49
2/8/2012	EK022SW	2.5	12028	7.75	11.34	5.3	6.2	7.48
2/8/2012	EK022SW	3.5	12166	7.91	11.51	5.23	5.8	7.49
2/8/2012	EK022SW	4.5	12180	8.03	11.52	5.25	4.8	7.49
2/8/2012	EK022SW	5.5	12264	7.99	11.53	5.45	5.2	7.48
Maspeth Creek								
2/9/2012	MC008SW	0.5	10681	11	10.42	3.88	13.8	7.46
2/9/2012	MC008SW	1.5	11040	9.65	10.73	4.09	14.1	7.54
2/9/2012	MC008SW	2.5	11458	9	11.12	4.21	9	7.53
2/9/2012	MC008SW	3.5	12190	8.72	11.77	4.56	6.5	7.53
2/9/2012	MC008SW	4.5	12290	8.58	11.87	4.58	5.8	7.54
2/9/2012	MC008SW	5.5	12425	8.88	12	4.6	4.5	7.54
2/9/2012	MC008SW	6.5	12465	8.97	12.04	4.6	4.1	7.55
Newtown Creek								
2/8/2012	NC007SW	0.5	12951	9.97	12.26	5.38	3	7.71
2/8/2012	NC007SW	1.5	12948	9.92	12.25	5.4	3	7.7
2/8/2012	NC007SW	2.5	13120	10	12.39	5.5	3.3	7.71
2/8/2012	NC007SW	3.5	13110	10	12.37	5.51	3.4	7.71
2/8/2012	NC007SW	4.5	13518	10.2	12.82	5.44	3.8	7.75

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2/8/2012	NC007SW	5.5	13580	10.32	12.88	5.44	4.1	7.76
2/8/2012	NC007SW	6.5	13743	10.46	13.06	5.41	4	7.78
2/8/2012	NC007SW	7.5	13846	10.59	13.18	5.37	4	7.8
2/8/2012	NC007SW	8.5	13885	10.68	13.22	5.38	4.2	7.81
2/8/2012	NC007SW	9.5	13895	10.78	13.22	5.4	4.4	7.83
2/8/2012	NC007SW	10.5	13966	10.84	13.27	5.46	5.5	7.85
2/8/2012	NC007SW	11.5	13975	10.89	13.27	5.48	6	7.86
2/8/2012	NC007SW	12.5	13970	10.93	13.27	5.47	5.6	7.87
2/12/2012	NC020SW	0.5	14314	11.58	13.89	4.82	7.5	7.95
2/12/2012	NC020SW	1.5	14316	11.59	13.88	4.86	7.5	7.95
2/12/2012	NC020SW	2.5	14317	11.59	13.88	4.86	7.3	7.95
2/12/2012	NC020SW	3.5	14319	11.57	13.88	4.86	7.3	7.95
2/12/2012	NC020SW	4.5	14320	11.58	13.88	4.86	7.3	7.95
2/12/2012	NC020SW	5.5	14318	11.58	13.88	4.87	8	7.95
2/12/2012	NC020SW	6.5	14322	11.57	13.88	4.87	7.2	7.95
2/12/2012	NC020SW	7.5	14319	11.58	13.88	4.87	7.3	7.95
2/12/2012	NC020SW	8.5	14325	11.58	13.88	4.88	7.9	7.95
2/12/2012	NC020SW	9.5	14331	11.57	13.88	4.89	8.5	7.95
2/12/2012	NC020SW	10.5	14342	11.56	13.9	4.88	8.2	7.95
2/12/2012	NC020SW	11.5	14348	11.56	13.9	4.89	7.6	7.95
2/12/2012	NC020SW	12.5	14339	11.56	13.89	4.89	7.9	7.95
2/12/2012	NC020SW	13.5	14342	11.55	13.89	4.9	7.9	7.95
2/12/2012	NC020SW	14.5	14355	11.55	13.9	4.9	7.9	7.95
2/12/2012	NC020SW	15.5	14364	11.54	13.91	4.9	7.4	7.95
2/12/2012	NC020SW	16.5	14374	11.55	13.92	4.9	7.8	7.95
2/12/2012	NC020SW	17.5	14370	11.54	13.92	4.9	7.8	7.95
2/12/2012	NC020SW	18.5	14371	11.53	13.92	4.91	8	7.95
2/7/2012	NC034SW	0.5	12526	10.06	12.03	4.81	2.6	7.55
2/7/2012	NC034SW	1.5	12530	10.05	12.03	4.81	2.6	7.55
2/7/2012	NC034SW	2.5	12532	10.06	12.03	4.82	2.7	7.55
2/7/2012	NC034SW	3.5	12563	10.06	12.06	4.82	2.6	7.56
2/7/2012	NC034SW	4.5	12865	10.08	12.16	5.41	3	7.58
2/7/2012	NC034SW	5.5	12724	10.02	12.11	5.14	4.1	7.57
2/7/2012	NC034SW	6.5	13220	10.14	12.49	5.49	3.3	7.6
2/7/2012	NC034SW	7.5	13447	10.3	12.69	5.6	4	7.64
2/7/2012	NC034SW	8.5	13571	10.49	12.79	5.65	3.9	7.67
2/7/2012	NC034SW	9.5	13613	10.6	12.85	5.62	4.2	7.7
2/7/2012	NC034SW	10.5	13642	10.7	12.88	5.61	4.6	7.71
2/7/2012	NC034SW	11.5	13699	10.8	12.94	5.6	4.5	7.73
2/7/2012	NC034SW	12.5	13718	10.89	12.98	5.55	4.7	7.74
2/7/2012	NC034SW	13.5	13748	10.97	13.02	5.53	5	7.75

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2/7/2012	NC034SW	14.5	13751	11.02	13.02	5.53	4.3	7.76
2/7/2012	NC034SW	15.5	13780	11.04	13.05	5.54	4.4	7.77
2/7/2012	NC034SW	16.5	13788	11.06	13.06	5.54	4.5	7.77
2/7/2012	NC034SW	17.5	13785	11.06	13.05	5.54	4.4	7.77
2/7/2012	NC034SW	18.5	13792	11.07	13.06	5.54	4.2	7.77
2/7/2012	NC034SW	19.5	13802	11.07	13.07	5.54	4.6	7.78
2/7/2012	NC034SW	20.5	13810	11.09	13.08	5.53	4.5	7.78
2/7/2012	NC034SW	21.5	13816	11.1	13.09	5.52	4.6	7.78
2/7/2012	NC034SW	22.5	13822	11.12	13.1	5.52	4.6	7.78
2/7/2012	NC034SW	23.5	13825	11.11	13.1	5.52	5	7.78
2/7/2012	NC034SW	24.5	13824	11.11	13.1	5.52	5	7.78
2/7/2012	NC046SW	0.5	12091	9.91	11.39	5.36	2.3	7.65
2/7/2012	NC046SW	1.5	12090	9.9	11.39	5.35	2.4	7.64
2/7/2012	NC046SW	2.5	12128	9.88	11.43	5.35	2.5	7.64
2/7/2012	NC046SW	3.5	12143	9.88	11.46	5.32	2.5	7.64
2/7/2012	NC046SW	4.5	12186	9.91	11.5	5.31	2.4	7.64
2/7/2012	NC046SW	5.5	12336	9.86	11.64	5.35	2.3	7.64
2/7/2012	NC046SW	6.5	12629	9.83	11.9	5.46	2.5	7.64
2/7/2012	NC046SW	7.5	12783	9.87	12.05	5.49	2.7	7.65
2/7/2012	NC046SW	8.5	13071	9.96	12.32	5.56	2.9	7.68
2/7/2012	NC046SW	9.5	13446	10.19	12.64	5.72	3.1	7.73
2/7/2012	NC046SW	10.5	13469	13.32	12.66	5.72	3.3	7.75
2/7/2012	NC046SW	11.5	13497	10.42	12.69	5.73	3.3	7.77
2/7/2012	NC046SW	12.5	13506	10.47	12.69	5.74	3.4	7.78
2/7/2012	NC046SW	13.5	13525	10.52	12.72	5.73	3.4	7.79
2/7/2012	NC046SW	14.5	13536	10.58	12.73	5.71	3.5	7.8
2/7/2012	NC046SW	15.5	13556	10.65	12.76	5.7	3.8	7.81
2/7/2012	NC046SW	16.5	13569	10.7	12.78	5.69	3.8	7.82
2/7/2012	NC046SW	17.5	13585	10.73	12.8	5.68	4	7.83
2/7/2012	NC046SW	18.5	13618	10.79	12.84	5.65	4.2	7.83
2/7/2012	NC046SW	19.5	13629	10.82	12.86	5.64	3.9	7.83
2/9/2012	NC068SW	0.5	12618	9.44	11.82	5.67	2.8	7.65
2/9/2012	NC068SW	1.5	12633	9.42	11.83	5.67	2.8	7.64
2/9/2012	NC068SW	2.5	12684	9.42	11.88	5.68	2.8	7.65
2/9/2012	NC068SW	3.5	12843	9.48	12.07	5.61	3.2	7.66
2/9/2012	NC068SW	4.5	12630	9.44	11.83	5.67	3.1	7.65
2/9/2012	NC068SW	5.5	12865	9.5	12.09	5.6	3.8	7.66
2/9/2012	NC068SW	6.5	13027	9.48	12.25	5.61	4.6	7.68
2/9/2012	NC068SW	7.5	13104	9.59	12.33	5.62	3.9	7.71
2/9/2012	NC068SW	8.5	13158	9.59	12.38	5.62	3.7	7.72
2/9/2012	NC068SW	9.5	13265	9.62	12.48	5.65	4	7.73

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2/9/2012	NC068SW	10.5	13272	9.67	12.5	5.63	5.6	7.74
2/9/2012	NC068SW	11.5	13484	9.71	12.75	5.54	8.8	7.75
2/9/2012	NC068SW	12.5	13555	9.75	12.83	5.52	8.8	7.76
2/9/2012	NC068SW	13.5	13607	9.77	12.88	5.51	7.9	7.76
2/9/2012	NC068SW	14.5	13645	9.83	12.93	5.5	6.7	7.77
2/9/2012	NC068SW	15.5	13640	9.84	12.92	5.5	6.7	7.77
2/9/2012	NC068SW	16.5	13664	9.84	12.95	5.5	6.5	7.78
2/6/2012	NC070SW	0.5	11125	8.89	10.68	4.51	2.6	7.36
2/6/2012	NC070SW	1.5	11175	8.9	10.72	4.54	2.9	7.36
2/6/2012	NC070SW	2.5	11236	8.88	10.78	4.56	2.6	7.36
2/6/2012	NC070SW	3.5	11786	9.02	11.25	4.86	2.5	7.38
2/6/2012	NC070SW	4.5	11978	9.1	11.39	5.02	2.4	7.4
2/6/2012	NC070SW	5.5	12270	9.37	11.61	5.24	2.7	7.43
2/6/2012	NC070SW	6.5	12732	9.57	12.03	5.4	3	7.46
2/6/2012	NC070SW	7.5	12750	9.66	12.04	5.41	2.7	7.48
2/6/2012	NC070SW	8.5	12820	9.7	12.11	5.42	2.9	7.49
2/6/2012	NC070SW	9.5	13033	9.88	12.32	5.44	2.8	7.53
2/6/2012	NC070SW	10.5	13088	9.95	12.37	5.47	3.2	7.54
2/6/2012	NC070SW	11.5	13118	9.99	12.4	5.47	3.2	7.56
2/6/2012	NC070SW	12.5	13158	10.05	12.43	5.48	3.1	7.57
2/6/2012	NC070SW	13.5	13214	10.1	12.49	5.49	3.3	7.59
2/6/2012	NC070SW	14.5	13257	10.12	12.53	5.5	3.3	7.59
2/6/2012	NC070SW	15.5	13280	10.2	12.55	5.5	3.4	7.62
2/6/2012	NC070SW	16.5	13316	10.2	12.57	5.55	3	7.62
2/10/2012	NC079SW	0.5	12820	8.29	11.9	6.01	3.4	7.55
2/10/2012	NC079SW	1.5	12870	8.28	11.97	5.97	3.4	7.55
2/10/2012	NC079SW	2.5	12910	8.35	12.01	5.96	3.1	7.56
2/10/2012	NC079SW	3.5	12903	8.43	12.01	5.94	3.2	7.57
2/10/2012	NC079SW	4.5	12983	8.56	12.12	5.86	3.2	7.59
2/10/2012	NC079SW	5.5	13079	8.8	12.3	5.63	2.9	7.61
2/10/2012	NC079SW	6.5	13127	8.94	12.36	5.61	3	7.63
2/10/2012	NC079SW	7.5	13179	9.02	12.41	5.6	2.9	7.64
2/10/2012	NC079SW	8.5	13229	9.02	12.47	5.57	3	7.64
2/10/2012	NC079SW	9.5	13258	9.03	12.5	5.59	2.9	7.64
2/10/2012	NC079SW	10.5	13330	9.04	12.57	5.59	2.8	7.65
2/10/2012	NC079SW	11.5	13399	9.09	12.64	5.58	2.7	7.65
2/10/2012	NC079SW	12.5	13435	9.19	12.68	5.57	2.8	7.66
2/10/2012	NC079SW	13.5	13442	9.22	12.69	5.57	2.8	7.67
2/10/2012	NC079SW	14.5	13542	9.25	12.8	5.56	2.8	7.68
2/10/2012	NC079SW	15.5	13610	9.29	12.87	5.55	3	7.69
2/10/2012	NC079SW	16.5	13626	9.37	12.89	5.54	3	7.7

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2/10/2012	NC079SW	17.5	13635	9.48	12.9	5.53	3.2	7.71
Whale Creek								
2/10/2012	WC001SW	0.5	13488	10.21	12.69	5.7	3.4	7.8
2/10/2012	WC001SW	1.5	13492	10.2	12.7	5.69	3.3	7.8
2/10/2012	WC001SW	2.5	13507	10.22	12.73	5.64	3.3	7.8
2/10/2012	WC001SW	3.5	13535	10.23	12.79	5.56	3.6	7.81
2/10/2012	WC001SW	4.5	13599	10.27	12.89	5.46	4	7.81
2/10/2012	WC001SW	5.5	13860	10.38	13.21	5.33	4.4	7.84
2/10/2012	WC001SW	6.5	13924	10.6	13.3	5.29	5.1	7.87
2/10/2012	WC001SW	7.5	13973	10.75	13.36	5.26	4.7	7.89
2/10/2012	WC001SW	8.5	13983	10.81	13.38	5.24	4.7	7.9
2/10/2012	WC001SW	9.5	13991	10.85	13.39	5.24	4.9	7.9
2/10/2012	WC001SW	10.5	13999	10.88	13.39	5.25	4.9	7.9
2/10/2012	WC001SW	11.5	14008	10.9	13.4	5.25	5.3	7.91
2/10/2012	WC001SW	12.5	14024	10.93	13.42	5.24	4.9	7.91
2/10/2012	WC001SW	13.5	14045	10.94	13.44	5.24	5	7.91
2/10/2012	WC001SW	14.5	14046	10.95	13.44	5.24	4.9	7.91
2/10/2012	WC001SW	15.5	14115	10.96	13.51	5.26	4.9	7.92
2/10/2012	WC001SW	16.5	14080	10.97	13.47	5.26	5.3	7.93
2/10/2012	WC001SW	17.5	14105	10.97	13.47	5.25	4.8	7.93
2/10/2012	WC001SW	18.5	14138	10.99	13.53	5.25	4.6	7.93
2/10/2012	WC001SW	19.5	14171	10.98	13.57	5.24	5.3	7.93
2/10/2012	WC001SW	20.5	14211	11.01	13.63	5.21	4.9	7.93
2/10/2012	WC001SW	21.5	14208	11.02	13.62	5.21	5.2	7.94
2/10/2012	WC001SW	22.5	14232	11.05	13.65	5.21	5.7	7.94
Event 2 – March 2012								
Dutch Kills								
3/23/2012	DK001SW	0.5	27430	16.3	21.91	13.84	3.5	8.55
3/23/2012	DK001SW	1.5	27042	16.19	22.17	13.31	3.6	8.47
3/23/2012	DK001SW	2.5	26768	16.07	22.09	12.54	4.3	8.47
3/23/2012	DK001SW	3.5	26540	16.01	22.17	12.25	4.4	8.43
3/23/2012	DK001SW	4.5	26100	15.87	22.3	11.22	4.7	8.35
3/23/2012	DK001SW	5.5	25944	15.54	22.35	10.94	4.4	8.32
3/23/2012	DK001SW	6.5	25836	15.1	22.39	10.65	4.2	8.25
3/23/2012	DK001SW	7.5	25799	14.31	22.46	10.5	4.4	8.21
3/23/2012	DK001SW	8.5	25770	14	22.5	10.45	4	8.18
3/23/2012	DK001SW	9.5	25791	13.44	22.5	10.42	3.8	8.17
3/23/2012	DK001SW	10.5	25778	13.01	22.56	10.22	4.4	8.13
3/23/2012	DK001SW	11.5	25830	12.88	22.6	10.29	3.9	8.14
3/23/2012	DK001SW	12.5	25822	12.72	22.6	10.2	3.8	8.13
3/23/2012	DK001SW	13.5	25825	12.27	22.66	10.12	3.8	8.12

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
3/23/2012	DK001SW	14.5	25777	12.08	22.76	9.98	4	8.08
3/23/2012	DK001SW	15.5	25780	11.83	22.78	9.93	3.6	8.07
3/23/2012	DK001SW	16.5	25801	11.46	22.79	9.94	4.1	8.07
3/23/2012	DK001SW	17.5	25814	11.28	22.82	9.93	4.5	8.07
3/20/2012	DK011SW	0.5	28235	15.97	21.16	16.68	2.7	8.57
3/20/2012	DK011SW	1.5	28278	16.63	21.32	16.25	2.6	8.64
3/20/2012	DK011SW	2.5	27020	17.92	21.96	13.61	3.7	8.74
3/20/2012	DK011SW	3.5	25941	19.03	21.79	11.85	7.7	8.72
3/20/2012	DK011SW	4.5	25213	19.87	22	10.26	7.6	8.66
3/20/2012	DK011SW	5.5	24920	20.17	22.16	9.66	7.3	8.61
3/20/2012	DK011SW	6.5	24675	19.53	22.07	9.33	7.8	8.43
3/20/2012	DK011SW	7.5	24572	18.44	22.12	9.1	6.6	8.35
3/20/2012	DK011SW	8.5	24499	17.5	22.17	8.89	6.2	8.31
3/20/2012	DK011SW	9.5	24318	16.01	22.27	8.47	6.6	7.91
3/20/2012	DK011SW	10.5	24224	12.7	22.38	8.18	6.6	7.61
3/20/2012	DK011SW	11.5	24244	8.82	22.44	8.07	8	7.43
East Branch								
3/21/2012	EB010SW	0.5	23325	3.8	18.5	13.43	12.6	7.07
3/21/2012	EB010SW	1.5	24095	2.74	20.21	11.93	21.2	7.06
English Kills								
3/22/2012	EK006SW	0.5	27180	13.26	21.11	14.92	3	8.19
3/22/2012	EK006SW	1.5	25555	14.32	21.41	11.87	3.7	8.35
3/22/2012	EK006SW	2.5	25307	15.08	21.48	11.35	3.9	8.38
3/22/2012	EK006SW	3.5	25376	14.48	21.93	10.5	3.6	8.28
3/22/2012	EK006SW	4.5	25118	14.14	22.04	10.07	3.8	8.25
3/22/2012	EK006SW	5.5	25093	13.97	22.08	10.01	3.7	8.22
3/22/2012	EK006SW	6.5	25077	13.16	22.13	9.88	3.9	8.15
3/22/2012	EK006SW	7.5	25103	12.62	22.17	9.83	3.8	8.12
3/22/2012	EK006SW	8.5	25120	12.25	22.21	9.8	3.7	8.1
3/22/2012	EK006SW	9.5	25136	11.95	22.25	9.79	3.9	8.09
3/22/2012	EK006SW	10.5	25107	11.1	22.29	9.67	4.3	8.04
3/22/2012	EK014SW	0.5	25837	12.06	21.83	11.2	3.3	8.16
3/22/2012	EK014SW	1.5	25439	12.19	22	10.91	3.7	8.15
3/22/2012	EK014SW	2.5	25253	11.97	22.12	10.15	3.9	8.13
3/22/2012	EK014SW	3.5	25190	11.89	22.12	10.11	4	8.13
3/22/2012	EK014SW	4.5	25164	11.62	22.22	9.96	3.9	8.11
3/22/2012	EK014SW	5.5	25163	11.19	22.25	9.81	3.8	8.09
3/22/2012	EK014SW	6.5	25168	10.85	22.29	9.72	4	8.06
3/22/2012	EK014SW	7.5	25197	10.55	22.38	9.66	3.9	8.06
3/22/2012	EK022SW	0.5	21085	6.05	17.1	12.25	5.8	7.12
3/22/2012	EK022SW	1.5	24439	8.1	21.51	10.13	6.6	7.5

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
3/22/2012	EK022SW	2.5	24698	8.75	21.81	9.88	5.4	7.61
3/22/2012	EK022SW	3.5	24811	9.22	21.94	9.79	4.8	7.71
3/22/2012	EK022SW	4.5	24891	9.09	22.01	9.77	5.6	7.72
Maspeth Creek								
3/20/2012	MC008SW	0.5	25650	15.49	21.99	10.93	4	8.38
3/20/2012	MC008SW	1.5	25597	15.41	22.24	10.55	4.7	8.37
3/20/2012	MC008SW	2.5	25579	15.53	22.26	10.45	4.4	8.41
3/20/2012	MC008SW	3.5	25533	16	22.28	10.37	4.3	8.44
Newtown Creek								
3/25/2012	NC007SW	0.5	26084	13.21	22.81	10.34	3.3	8.35
3/25/2012	NC007SW	1.5	26084	13.23	22.81	10.34	3.5	8.35
3/25/2012	NC007SW	2.5	26078	13.16	22.84	10.33	3.4	8.34
3/25/2012	NC007SW	3.5	26059	12.72	22.87	10.2	3.7	8.29
3/25/2012	NC007SW	4.5	26047	12.36	22.9	10.14	3.8	8.25
3/25/2012	NC007SW	5.5	26015	11.75	22.94	10.02	3.6	8.19
3/25/2012	NC007SW	6.5	26054	11.85	22.92	10.13	3.6	8.24
3/25/2012	NC007SW	7.5	26040	11.58	22.94	10.07	3.7	8.21
3/25/2012	NC007SW	8.5	26021	11.26	22.98	9.98	3.6	8.16
3/25/2012	NC007SW	9.5	25984	10.76	22.99	9.9	3.8	8.1
3/25/2012	NC007SW	10.5	25996	10.65	23	9.91	4.2	8.11
3/25/2012	NC007SW	11.5	25996	10.43	23.04	9.85	4.5	8.08
3/25/2012	NC007SW	12.5	25987	10.12	23.07	9.79	4.8	8.04
3/25/2012	NC007SW	13.5	25985	9.86	23.08	9.75	5.4	8.02
3/25/2012	NC007SW	14.5	25986	9.8	23.09	9.76	4.8	8.02
3/25/2012	NC007SW	15.5	25990	9.75	23.1	9.74	4.6	8.01
3/25/2012	NC020SW	0.5	26214	15.66	22.62	10.87	3.7	8.51
3/25/2012	NC020SW	1.5	26171	14.34	22.66	10.72	3.6	8.47
3/25/2012	NC020SW	2.5	26158	14.63	22.71	10.68	3.7	8.45
3/25/2012	NC020SW	3.5	26135	14.49	22.72	10.61	4.2	8.43
3/25/2012	NC020SW	4.5	26126	14.17	22.75	10.5	4	8.39
3/25/2012	NC020SW	5.5	26154	13.79	22.83	10.46	4.2	8.36
3/25/2012	NC020SW	6.5	26195	12.92	22.92	10.34	5.3	8.3
3/25/2012	NC020SW	7.5	26200	12.66	22.95	10.32	4.9	8.28
3/25/2012	NC020SW	8.5	26205	12.3	22.98	10.27	5.8	8.26
3/25/2012	NC020SW	9.5	26203	11.89	23.02	10.22	5.1	8.22
3/25/2012	NC020SW	10.5	26205	11.43	23.06	10.12	5.6	8.18
3/25/2012	NC020SW	11.5	26205	11.32	23.09	10.11	5.6	8.17
3/25/2012	NC020SW	12.5	26202	11.06	23.13	10.02	5.6	8.15
3/25/2012	NC020SW	13.5	26201	10.85	23.17	10	5	8.13
3/25/2012	NC020SW	14.5	26200	10.65	23.16	9.95	5.6	8.12
3/25/2012	NC020SW	15.5	26209	10.53	23.23	9.89	4.4	8.1

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
3/25/2012	NC020SW	16.5	26209	10.39	23.23	9.87	4.5	8.09
3/25/2012	NC020SW	17.5	26216	10.27	23.27	9.83	4.6	8.08
3/25/2012	NC020SW	18.5	26216	10.17	23.28	9.81	5.1	8.07
3/25/2012	NC020SW	19.5	26217	10.1	23.29	9.79	5	8.07
3/25/2012	NC020SW	20.5	26215	10.04	23.3	9.78	4.6	8.06
3/21/2012	NC034SW	0.5	25733	16.55	21.57	11.74	3.4	8.45
3/21/2012	NC034SW	1.5	25584	15.24	21.87	10.91	4.1	8.37
3/21/2012	NC034SW	2.5	25568	14.27	22.24	10.38	3.8	8.32
3/21/2012	NC034SW	3.5	25521	13.75	22.4	10.2	4	8.26
3/21/2012	NC034SW	4.5	25515	13.16	22.56	9.97	4.4	8.23
3/21/2012	NC034SW	5.5	25465	12.41	22.59	9.72	5.2	8.18
3/21/2012	NC034SW	6.5	25463	12.12	22.66	9.67	4.6	8.17
3/21/2012	NC034SW	7.5	25452	11.67	22.76	9.49	5.1	8.14
3/21/2012	NC034SW	8.5	25455	11.35	22.78	9.41	4.8	8.12
3/21/2012	NC034SW	9.5	25465	11.27	22.8	9.42	4.6	8.12
3/21/2012	NC034SW	10.5	25474	11.22	22.82	9.4	4.7	8.12
3/21/2012	NC034SW	11.5	25487	11.1	22.86	9.36	4.6	8.11
3/21/2012	NC034SW	12.5	25498	11.05	22.87	9.36	4.4	8.11
3/21/2012	NC034SW	13.5	25508	11	22.88	9.35	4.5	8.11
3/21/2012	NC034SW	14.5	25517	10.92	22.94	9.31	4.4	8.1
3/21/2012	NC034SW	15.5	25521	10.85	22.98	9.26	4.7	8.09
3/21/2012	NC034SW	16.5	25532	10.73	22.98	9.23	4.3	8.09
3/21/2012	NC034SW	17.5	25542	10.67	23.02	9.18	3.6	8.08
3/21/2012	NC034SW	18.5	25547	10.63	23.04	9.17	3.6	8.08
3/21/2012	NC034SW	19.5	25554	10.56	23.11	9.13	4.1	8.07
3/21/2012	NC034SW	20.5	25583	10.37	23.19	8.96	3.6	8.05
3/21/2012	NC034SW	21.5	25576	10.32	23.18	8.97	3.5	8.06
3/21/2012	NC034SW	22.5	25582	10.32	23.2	8.97	3.6	8.06
3/20/2012	NC046SW	0.5	26450	17.85	21.8	12.63	9	8.58
3/20/2012	NC046SW	1.5	26225	17.78	21.92	12.09	10.5	8.57
3/20/2012	NC046SW	2.5	25793	18.1	22.04	11.3	11.2	8.6
3/20/2012	NC046SW	3.5	25480	17.45	22.25	10.37	11.5	8.54
3/20/2012	NC046SW	4.5	25357	16.59	22.37	9.97	11.3	8.49
3/20/2012	NC046SW	5.5	25225	14.5	22.52	9.53	10.4	8.33
3/20/2012	NC046SW	6.5	25124	13.2	22.61	9.18	9.6	8.26
3/20/2012	NC046SW	7.5	25126	12.39	22.64	9.14	7.8	8.23
3/20/2012	NC046SW	8.5	25121	12.22	22.65	9.11	7	8.22
3/20/2012	NC046SW	9.5	25095	12.05	22.66	9.06	7.1	8.21
3/20/2012	NC046SW	10.5	25070	11.96	22.66	9.02	6.5	8.2
3/20/2012	NC046SW	11.5	25062	11.83	22.67	8.99	6	8.2
3/20/2012	NC046SW	12.5	25066	11.74	22.68	8.98	5.7	8.19

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3/20/2012	NC046SW	13.5	25085	11.65	22.69	8.99	6	8.19
3/20/2012	NC046SW	14.5	25110	11.58	22.7	9.01	5.6	8.18
3/20/2012	NC046SW	15.5	25117	11.48	22.71	9	5.3	8.18
3/20/2012	NC046SW	16.5	25126	11.41	22.72	9.01	5.6	8.17
3/20/2012	NC046SW	17.5	25137	11.33	22.73	9	5.1	8.17
3/20/2012	NC046SW	18.5	25139	11.29	22.74	9	5.5	8.17
3/20/2012	NC046SW	19.5	25135	11.18	22.74	8.98	5.2	8.16
3/20/2012	NC046SW	20.5	25134	11.11	22.75	8.97	5.9	8.15
3/20/2012	NC046SW	21.5	25171	10.91	22.85	8.9	4.9	8.13
3/19/2012	NC068SW	0.5	24822	17.39	20.65	12.22	12.1	8.58
3/19/2012	NC068SW	1.5	24925	17.82	20.94	11.73	13.3	8.62
3/19/2012	NC068SW	2.5	24940	18.35	21	11.38	14.7	8.63
3/19/2012	NC068SW	3.5	24975	18.87	21.2	11.35	15.4	8.62
3/19/2012	NC068SW	4.5	24884	18.92	21.26	11.08	15.3	8.58
3/19/2012	NC068SW	5.5	24521	17.91	21.27	10.24	14.6	8.49
3/19/2012	NC068SW	6.5	24423	17.72	21.58	10.16	13.9	8.44
3/19/2012	NC068SW	7.5	24030	16.67	21.57	9.08	12.6	8.33
3/19/2012	NC068SW	8.5	24109	15.86	21.6	9.18	11.9	8.33
3/19/2012	NC068SW	9.5	24042	15.48	21.72	8.94	10.9	8.3
3/19/2012	NC068SW	10.5	24090	14.25	21.8	8.87	9.4	8.26
3/19/2012	NC068SW	11.5	23972	13.45	21.93	8.44	8.1	8.18
3/19/2012	NC068SW	12.5	23988	12.7	22	8.37	7.7	8.14
3/19/2012	NC068SW	13.5	24037	12.33	22.03	8.37	6.8	8.14
3/19/2012	NC068SW	14.5	24055	12.19	22.09	8.33	6.5	8.12
3/19/2012	NC068SW	15.5	24088	11.73	22.11	8.33	6.1	8.12
3/19/2012	NC068SW	16.5	24119	11.32	22.19	8.26	6	8.06
3/25/2012	NC070SW	0.5	25745	11.61	22.42	10.42	3.5	8.07
3/25/2012	NC070SW	1.5	25728	11.69	22.42	10.43	3.5	8.09
3/25/2012	NC070SW	2.5	25740	11.69	22.45	10.42	3.5	8.09
3/25/2012	NC070SW	3.5	25781	11.57	22.47	10.44	3.7	8.07
3/25/2012	NC070SW	4.5	25778	11.52	22.47	10.44	3.6	8.07
3/25/2012	NC070SW	5.5	25794	11.53	22.45	10.44	3.3	8.07
3/25/2012	NC070SW	6.5	25852	11.13	22.51	10.46	3.5	8.03
3/25/2012	NC070SW	7.5	25992	10.62	22.63	10.47	3.5	7.97
3/25/2012	NC070SW	8.5	26052	10.16	22.73	10.44	3.7	7.95
3/25/2012	NC070SW	9.5	26089	10.09	22.78	10.44	3.7	7.95
3/25/2012	NC070SW	10.5	26151	10.11	22.83	10.41	3.6	7.96
3/25/2012	NC070SW	11.5	26154	10.12	22.83	10.41	3.6	7.96
3/25/2012	NC070SW	12.5	26160	10.16	22.85	10.41	3.7	7.97
3/25/2012	NC070SW	13.5	26188	10.08	22.92	10.33	4.2	7.96
3/25/2012	NC070SW	14.5	26183	10.01	22.92	10.31	4	7.95

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3/25/2012	NC070SW	15.5	26178	9.95	22.9	10.3	3.8	7.95
3/25/2012	NC070SW	16.5	26188	9.94	22.99	10.31	4.4	7.95
3/25/2012	NC070SW	17.5	26189	9.78	22.99	10.21	4.7	7.94
3/23/2012	NC079SW	0.5	26572	16.08	22.13	12.17	5.1	8.46
3/23/2012	NC079SW	1.5	26586	16.27	22.12	12.34	5.2	8.47
3/23/2012	NC079SW	2.5	26473	16.09	22.2	12.02	5.5	8.45
3/23/2012	NC079SW	3.5	26240	15.69	22.23	11.56	5.3	8.41
3/23/2012	NC079SW	4.5	26075	15.08	22.3	11.22	5.2	8.36
3/23/2012	NC079SW	5.5	25945	14.01	22.27	10.92	5.2	8.3
3/23/2012	NC079SW	6.5	25946	13.76	22.3	10.95	5	8.3
3/23/2012	NC079SW	7.5	25927	13.49	22.34	10.91	4.9	8.28
3/23/2012	NC079SW	8.5	25821	12.74	22.37	10.68	4.8	8.22
3/23/2012	NC079SW	9.5	25769	12.27	22.38	10.52	4.8	8.19
3/23/2012	NC079SW	10.5	25784	12.12	22.4	10.59	4.8	8.19
3/23/2012	NC079SW	11.5	25723	11.73	22.42	10.43	4.7	8.16
3/23/2012	NC079SW	12.5	25660	11.31	22.45	10.3	4.3	8.12
3/23/2012	NC079SW	13.5	25645	11.01	22.43	10.22	4.4	8.11
3/23/2012	NC079SW	14.5	25594	10.71	22.47	10.12	4.5	8.08
3/23/2012	NC079SW	15.5	25657	10.75	22.49	10.23	4.8	8.1
3/23/2012	NC079SW	16.5	25602	10.53	22.49	10.11	4.7	8.08
3/23/2012	NC079SW	17.5	25595	10.49	22.48	10.12	4.6	8.08
3/23/2012	NC079SW	18.5	25608	10.47	22.49	10.13	4.5	8.08
Whale Creek								
3/19/2012	WC001SW	0.5	24709	15.26	21.88	9.68	4	8.4
3/19/2012	WC001SW	1.5	24660	15.41	21.91	9.6	4.5	8.42
3/19/2012	WC001SW	2.5	24602	15.54	21.92	9.46	5	8.4
3/19/2012	WC001SW	3.5	24631	15.66	21.98	9.54	4.3	8.43
3/19/2012	WC001SW	4.5	24482	15.53	21.97	9.2	4.4	8.36
3/19/2012	WC001SW	5.5	24500	15.46	22.02	9.16	5	8.37
3/19/2012	WC001SW	6.5	24405	14.72	22.13	8.8	5.8	8.25
3/19/2012	WC001SW	7.5	24381	14.21	22.17	8.74	6	8.23
3/19/2012	WC001SW	8.5	24381	13.66	22.19	8.69	5.8	8.2
3/19/2012	WC001SW	9.5	24394	13.44	22.2	8.68	6	8.19
3/19/2012	WC001SW	10.5	24413	12.93	22.26	8.61	7.5	8.17
3/19/2012	WC001SW	11.5	24411	12.81	22.26	8.6	6.5	8.17
3/19/2012	WC001SW	12.5	24413	12.63	22.26	8.58	5.5	8.15
3/19/2012	WC001SW	13.5	24417	12.49	22.28	8.6	4.1	8.15
3/19/2012	WC001SW	14.5	24432	12.29	22.32	8.56	8.3	8.15
3/19/2012	WC001SW	15.5	24441	12.03	22.33	8.55	11.1	8.14
3/19/2012	WC001SW	16.5	24447	11.84	22.35	8.55	9.5	8.13
3/19/2012	WC001SW	17.5	24451	11.71	22.36	8.51	9.5	8.13

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
3/19/2012	WC001SW	18.5	24452	11.55	22.37	8.48	9	8.12
3/19/2012	WC001SW	19.5	24456	11.47	22.39	8.49	10.3	8.12
3/19/2012	WC001SW	20.5	24457	11.39	22.39	8.48	8.5	8.12
3/19/2012	WC001SW	21.5	24460	11.33	22.4	8.48	8.7	8.11
3/19/2012	WC001SW	22.5	24465	10.93	22.44	8.42	8.2	8.06
Event 3 – April 2012								
Dutch Kills								
4/6/2012	DK001SW	0.5	26205	8.57	22.66	10.79	4.6	7.78
4/6/2012	DK001SW	1.5	26213	8.62	22.75	10.7	4.7	7.8
4/6/2012	DK001SW	2.5	26210	8.67	22.73	10.65	4.6	7.8
4/6/2012	DK001SW	3.5	26270	8.73	22.8	10.68	4.7	7.82
4/6/2012	DK001SW	4.5	26330	8.83	22.89	10.67	4.7	7.84
4/6/2012	DK001SW	5.5	26342	8.91	22.89	10.66	4.9	7.85
4/6/2012	DK001SW	6.5	26655	8.94	23.23	10.14	5.5	7.86
4/6/2012	DK001SW	7.5	26713	8.99	23.64	10.06	5.8	7.87
4/6/2012	DK001SW	8.5	26785	9.01	23.75	10.01	5.9	7.88
4/6/2012	DK001SW	9.5	26830	8.99	23.78	9.98	6	7.88
4/6/2012	DK001SW	10.5	26857	8.95	23.8	9.98	6.2	7.88
4/6/2012	DK001SW	11.5	26876	8.94	23.81	9.97	6.2	7.88
4/6/2012	DK001SW	12.5	26913	8.94	23.9	9.93	5.9	7.89
4/6/2012	DK001SW	13.5	26911	8.95	23.88	9.92	6.1	7.89
4/6/2012	DK001SW	14.5	26916	8.96	23.9	9.92	5.7	7.89
4/6/2012	DK001SW	15.5	26924	8.97	23.91	9.91	6	7.89
4/6/2012	DK001SW	16.5	26928	8.98	23.92	9.9	5.6	7.9
4/6/2012	DK001SW	17.5	26934	8.98	23.94	9.88	5.8	7.9
4/6/2012	DK001SW	18.5	26944	8.99	23.97	9.87	5.8	7.9
4/6/2012	DK001SW	19.5	26953	9.01	23.97	9.85	5.9	7.9
4/6/2012	DK011SW	0.5	27095	6.12	22.1	12.71	7.1	7.54
4/6/2012	DK011SW	1.5	26723	6.84	22.52	11.73	5.8	7.66
4/6/2012	DK011SW	2.5	26401	6.41	22.73	10.94	5.4	7.54
4/6/2012	DK011SW	3.5	26565	5.84	22.9	10.95	5.5	7.49
4/6/2012	DK011SW	4.5	26739	5.26	23.05	10.96	5.4	7.46
4/6/2012	DK011SW	5.5	26792	5.03	23.19	10.89	9.7	7.42
4/6/2012	DK011SW	6.5	26875	4.77	23.37	10.72	6.3	7.38
4/6/2012	DK011SW	7.5	26817	4.2	23.42	10.51	6.3	7.35
4/6/2012	DK011SW	8.5	26825	4.14	23.45	10.48	6.1	7.38
4/6/2012	DK011SW	9.5	26858	4.26	23.49	10.46	7.1	7.39
4/6/2012	DK011SW	10.5	26899	4.29	23.54	10.45	13.5	7.4
4/6/2012	DK011SW	11.5	26940	4.3	23.58	10.42	21.7	7.43
4/6/2012	DK011SW	12.5	26896	4.83	23.59	10.34	19.9	7.5

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
East Branch								
4/5/2012	EB010SW	0.5	11096	7.37	9.53	8.39	8.2	7.17
4/5/2012	EB010SW	1.5	21109	6.77	17.3	12.05	11.1	7.26
4/5/2012	EB010SW	2.5	23765	6.72	19.53	12.39	11.2	7.39
4/5/2012	EB010SW	3.5	24349	6.89	20.28	11.9	7.5	7.5
4/5/2012	EB010SW	4.5	24488	5.26	20.57	11.61	12.1	7.39
4/5/2012	EB010SW	5.5	24764	3.24	21.01	11.24	18.5	7.26
English Kills								
4/5/2012	EK006SW	0.5	25122	10.62	20.2	13.48	5.3	8.02
4/5/2012	EK006SW	1.5	25029	10.48	20.28	13.04	5.2	7.99
4/5/2012	EK006SW	2.5	24979	10.16	20.33	12.42	5.3	7.96
4/5/2012	EK006SW	3.5	24862	10.44	20.42	12.51	5.6	7.99
4/5/2012	EK006SW	4.5	24716	10.18	20.55	12.01	6	7.95
4/5/2012	EK006SW	5.5	24722	8.83	20.84	11.55	5.3	7.77
4/5/2012	EK006SW	6.5	24756	7.74	20.89	11.37	5.2	7.7
4/5/2012	EK006SW	7.5	24855	6.46	21.19	11.18	5.2	7.58
4/5/2012	EK006SW	8.5	24984	5.46	21.25	10.94	5.2	7.51
4/5/2012	EK006SW	9.5	24888	5.56	21.19	11.14	5.2	7.53
4/5/2012	EK006SW	10.5	24934	5.44	21.4	11.05	5.3	7.52
4/5/2012	EK006SW	11.5	25135	5.36	21.63	10.8	5.1	7.5
4/5/2012	EK006SW	12.5	25176	5.41	21.68	10.78	4.8	7.51
4/5/2012	EK006SW	13.5	25229	5.43	21.89	10.7	5.1	7.51
4/5/2012	EK006SW	14.5	25281	5.14	21.86	10.63	5.3	7.48
4/5/2012	EK006SW	15.5	25282	5.05	21.88	10.63	5.5	7.47
4/4/2012	EK014SW	0.5	23727	8.52	19.57	12.04	5.2	7.75
4/4/2012	EK014SW	1.5	23659	8.39	19.54	12.21	5.1	7.73
4/4/2012	EK014SW	2.5	23644	8.44	19.59	12.39	5.3	7.76
4/4/2012	EK014SW	3.5	24356	7.32	20.66	11.21	8.2	7.66
4/4/2012	EK014SW	4.5	24426	7.55	20.71	11.47	8.1	7.87
4/4/2012	EK014SW	5.5	24488	5.59	20.97	10.99	7.7	7.48
4/4/2012	EK014SW	6.5	24621	4.54	21.2	10.8	6.2	7.4
4/4/2012	EK014SW	7.5	24905	4.06	21.57	10.63	5.7	7.37
4/4/2012	EK014SW	8.5	25052	3.7	21.71	10.56	5.8	7.35
4/4/2012	EK022SW	0.5	13165	6.91	10.7	11.17	8.6	7.36
4/4/2012	EK022SW	1.5	13665	6.63	11.09	11.18	8.6	7.34
4/4/2012	EK022SW	2.5	22541	5.65	18.9	11.38	9.8	7.3
4/4/2012	EK022SW	3.5	23914	5.8	20.1	11.4	10.3	7.46
4/4/2012	EK022SW	4.5	24212	5.29	20.57	11.18	10.4	7.4
Maspeth Creek								
4/6/2012	MC008SW	0.5	21201	6	18.6	9.52	13.7	7.18
4/6/2012	MC008SW	1.5	24051	7.15	20.61	10.85	6.8	7.5

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
4/6/2012	MC008SW	2.5	24473	7.75	20.97	10.91	6.7	7.6
4/6/2012	MC008SW	3.5	24837	8.06	21.15	11.14	6.8	7.63
4/6/2012	MC008SW	4.5	24922	8.17	21.23	11.17	6.9	7.65
Newtown Creek								
4/3/2012	NC007SW	0.5	25637	8.8	22.73	9.78	5	7.67
4/3/2012	NC007SW	1.5	25646	8.62	22.74	9.79	5.1	7.68
4/3/2012	NC007SW	2.5	25662	8.55	22.74	9.81	5.5	7.69
4/3/2012	NC007SW	3.5	25689	8.49	22.79	9.78	5.7	7.69
4/3/2012	NC007SW	4.5	25680	8.47	22.8	9.73	5.4	7.7
4/3/2012	NC007SW	5.5	25687	8.44	22.8	9.75	5.4	7.71
4/3/2012	NC007SW	6.5	25705	8.43	22.81	9.75	5.5	7.72
4/3/2012	NC007SW	7.5	25701	8.43	22.83	9.72	5.3	7.72
4/3/2012	NC007SW	8.5	25746	8.46	22.86	9.73	5.4	7.73
4/3/2012	NC007SW	9.5	25733	8.5	22.95	9.66	5.3	7.73
4/3/2012	NC007SW	10.5	25778	8.57	23.03	9.54	5.2	7.75
4/3/2012	NC007SW	11.5	25779	8.61	23.04	9.52	4.9	7.75
4/3/2012	NC007SW	12.5	25782	8.64	23.06	9.49	4.9	7.76
4/3/2012	NC007SW	13.5	25786	8.67	23.09	9.46	5.1	7.76
4/3/2012	NC007SW	14.5	25886	8.72	23.18	9.45	4.9	7.77
4/3/2012	NC007SW	15.5	25915	8.76	23.2	9.46	5	7.78
4/3/2012	NC007SW	16.5	25965	8.77	23.26	9.46	4.9	7.78
4/3/2012	NC007SW	17.5	25983	8.77	23.27	9.47	5.2	7.78
4/3/2012	NC007SW	18.5	26001	8.77	23.29	9.48	5.1	7.79
4/8/2012	NC020SW	0.5	27216	9.49	23.97	10.24	7.1	7.92
4/8/2012	NC020SW	1.5	27229	9.44	23.98	10.25	6.8	7.93
4/8/2012	NC020SW	2.5	27213	9.42	23.98	10.23	7.8	7.93
4/8/2012	NC020SW	3.5	27213	9.41	23.99	10.19	7.3	7.93
4/8/2012	NC020SW	4.5	27201	9.38	23.99	10.18	7.5	7.93
4/8/2012	NC020SW	5.5	27195	9.34	23.99	10.16	7.6	7.93
4/8/2012	NC020SW	6.5	27195	9.32	24.01	10.16	7	7.93
4/8/2012	NC020SW	7.5	27196	9.29	24.01	10.13	7.6	7.93
4/8/2012	NC020SW	8.5	27196	9.27	24.03	10.14	8.7	7.93
4/8/2012	NC020SW	9.5	27191	9.25	24.03	10.11	7.6	7.93
4/8/2012	NC020SW	10.5	27188	9.25	24.04	10.1	7.3	7.93
4/8/2012	NC020SW	11.5	27197	9.23	24.05	10.1	7.1	7.93
4/8/2012	NC020SW	12.5	27191	9.23	24.04	10.09	8.7	7.93
4/8/2012	NC020SW	13.5	27198	9.22	24.06	10.09	9.1	7.93
4/8/2012	NC020SW	14.5	27211	9.22	24.06	10.09	8.6	7.93
4/8/2012	NC020SW	15.5	27216	9.22	24.06	10.1	8.2	7.93
4/8/2012	NC020SW	16.5	27228	9.22	24.08	10.09	7.6	7.94
4/8/2012	NC020SW	17.5	27235	9.21	24.11	10.07	7.4	7.94

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
4/8/2012	NC020SW	18.5	27241	9.22	24.12	10.06	7.4	7.94
4/8/2012	NC020SW	19.5	27265	9.22	24.16	10.06	6.8	7.94
4/8/2012	NC020SW	20.5	27281	9.23	24.18	10.02	7.3	7.95
4/8/2012	NC020SW	21.5	27290	9.24	24.2	10	6.4	7.95
4/8/2012	NC020SW	22.5	27291	9.24	24.22	9.99	6.3	7.96
4/3/2012	NC034SW	0.5	24728	8.91	21.2	10.86	4.5	7.82
4/3/2012	NC034SW	1.5	24715	8.9	21.21	10.86	4.5	7.82
4/3/2012	NC034SW	2.5	24714	8.89	21.21	10.84	4.5	7.83
4/3/2012	NC034SW	3.5	24689	8.85	21.27	10.75	4.7	7.82
4/3/2012	NC034SW	4.5	24678	8.79	21.28	10.74	4.6	7.82
4/3/2012	NC034SW	5.5	24682	8.63	21.3	10.52	4.5	7.8
4/3/2012	NC034SW	6.5	24712	8.45	21.45	10.44	4.6	7.77
4/3/2012	NC034SW	7.5	24751	8.26	21.7	10.41	4.5	7.75
4/3/2012	NC034SW	8.5	24930	7.95	21.82	10.2	4.5	7.72
4/3/2012	NC034SW	9.5	24993	7.77	21.92	10.23	4.5	7.72
4/3/2012	NC034SW	10.5	25180	7.63	22.12	10.1	4.4	7.7
4/3/2012	NC034SW	11.5	25371	7.48	22.3	10.14	4.6	7.69
4/3/2012	NC034SW	12.5	25505	7.53	22.45	10.05	5.1	7.7
4/3/2012	NC034SW	13.5	25635	7.62	22.6	10	5.3	7.71
4/3/2012	NC034SW	14.5	25655	7.65	22.64	10.01	5.1	7.71
4/3/2012	NC034SW	15.5	25698	7.73	22.69	9.98	5.2	7.72
4/3/2012	NC034SW	16.5	25767	7.85	22.87	9.9	5.4	7.74
4/3/2012	NC034SW	17.5	25917	8.12	23.01	9.73	5.5	7.78
4/3/2012	NC034SW	18.5	25920	8.25	23.11	9.78	5.4	7.78
4/3/2012	NC034SW	19.5	25987	8.41	23.19	9.68	5.3	7.8
4/3/2012	NC034SW	20.5	26040	8.52	23.21	9.64	5.3	7.81
4/3/2012	NC034SW	21.5	26051	8.5	23.23	9.64	6	7.81
4/8/2012	NC046SW	0.5	25878	9.12	22.6	10.38	5.3	7.89
4/8/2012	NC046SW	1.5	25885	9.12	22.6	10.37	5.3	7.89
4/8/2012	NC046SW	2.5	25885	9.11	2.61	10.37	5.4	7.89
4/8/2012	NC046SW	3.5	25997	9.09	22.74	10.36	5.7	7.89
4/8/2012	NC046SW	4.5	26338	8.86	23.04	10.37	6.6	7.86
4/8/2012	NC046SW	5.5	26410	8.75	23.1	10.36	7	7.85
4/8/2012	NC046SW	6.5	26340	8.73	23	10.37	7.3	7.86
4/8/2012	NC046SW	7.5	26305	8.77	23.01	10.38	6.5	7.86
4/8/2012	NC046SW	8.5	26396	8.72	23.08	10.38	6.7	7.86
4/8/2012	NC046SW	9.5	26528	8.65	23.23	10.37	7.3	7.86
4/8/2012	NC046SW	10.5	26632	8.59	23.34	10.36	7.9	7.85
4/8/2012	NC046SW	11.5	26685	8.54	23.38	10.36	8.4	7.85
4/8/2012	NC046SW	12.5	26666	8.51	23.37	10.36	8.3	7.85
4/8/2012	NC046SW	13.5	26684	8.5	23.38	10.35	8.4	7.85

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
4/8/2012	NC046SW	14.5	26686	8.49	23.39	10.35	8.5	7.85
4/8/2012	NC046SW	15.5	26749	8.46	23.45	10.36	9.2	7.85
4/8/2012	NC046SW	16.5	26781	8.41	23.46	10.36	10.5	7.84
4/8/2012	NC046SW	17.5	26760	8.41	23.44	10.36	9.5	7.84
4/8/2012	NC046SW	18.5	26755	8.41	23.44	10.36	10.1	7.84
4/8/2012	NC046SW	19.5	26756	8.41	23.45	10.35	8.9	7.85
4/8/2012	NC046SW	20.5	26767	8.41	23.46	10.36	9.6	7.84
4/8/2012	NC046SW	21.5	26785	8.4	23.48	10.36	9.6	7.84
4/8/2012	NC046SW	22.5	26804	8.4	23.49	10.36	9.7	7.84
4/8/2012	NC046SW	23.5	26816	8.39	23.5	10.36	10	7.84
4/2/2012	NC068SW	0.5	24984	9.21	21.13	11.39	5.2	7.7
4/2/2012	NC068SW	1.5	24987	9.19	21.18	11.36	5.3	7.72
4/2/2012	NC068SW	2.5	24983	9.1	21.25	11.16	5.7	7.72
4/2/2012	NC068SW	3.5	24977	9.01	21.28	11.12	5.5	7.74
4/2/2012	NC068SW	4.5	24965	8.89	21.39	10.95	5.6	7.74
4/2/2012	NC068SW	5.5	24964	8.8	21.41	10.89	5.5	7.75
4/2/2012	NC068SW	6.5	24961	8.73	21.43	10.86	5.6	7.76
4/2/2012	NC068SW	7.5	24973	8.5	21.57	10.69	5.4	7.73
4/2/2012	NC068SW	8.5	25108	8.01	21.76	10.52	5.3	7.68
4/2/2012	NC068SW	9.5	25233	7.47	21.93	10.46	5.4	7.63
4/2/2012	NC068SW	10.5	25391	7.01	22.13	10.39	5.2	7.58
4/2/2012	NC068SW	11.5	25487	6.61	22.25	10.35	5.1	7.56
4/2/2012	NC068SW	12.5	25586	6.53	22.36	10.33	4.9	7.55
4/2/2012	NC068SW	13.5	25618	6.46	22.38	10.31	5.1	7.54
4/2/2012	NC068SW	14.5	25659	6.21	22.44	10.28	4.9	7.52
4/2/2012	NC068SW	15.5	25753	5.99	22.55	10.24	5.2	7.5
4/2/2012	NC068SW	16.5	25772	5.68	22.58	10.23	5.6	7.49
4/2/2012	NC068SW	17.5	25793	5.75	22.6	10.23	5.5	7.51
4/2/2012	NC068SW	18.5	25819	5.83	22.63	10.22	5.3	7.52
4/2/2012	NC068SW	19.5	25842	6.01	22.67	10.21	5.2	7.54
4/5/2012	NC070SW	0.5	25109	8.98	20.99	11.86	5.5	7.83
4/5/2012	NC070SW	1.5	25117	9.08	21.04	11.83	5.7	7.83
4/5/2012	NC070SW	2.5	25249	8.78	21.33	11.42	6.7	7.79
4/5/2012	NC070SW	3.5	25301	8.61	21.3	11.39	6.5	7.77
4/5/2012	NC070SW	4.5	25346	8.47	21.62	11.3	7.1	7.76
4/5/2012	NC070SW	5.5	25358	8.31	21.64	11.17	6.8	7.75
4/5/2012	NC070SW	6.5	25370	8.2	21.72	11.12	6.8	7.75
4/5/2012	NC070SW	7.5	25363	8.15	21.68	11.1	6.5	7.75
4/5/2012	NC070SW	8.5	25398	8.08	21.75	11.05	7.1	7.74
4/5/2012	NC070SW	9.5	25413	8.02	21.78	11.03	7.5	7.73
4/5/2012	NC070SW	10.5	25550	7.61	21.99	10.85	9.5	7.7

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
4/5/2012	NC070SW	11.5	25607	7.54	22.09	10.8	7.9	7.69
4/5/2012	NC070SW	12.5	25685	7.3	22.23	10.74	7.9	7.69
4/5/2012	NC070SW	13.5	25714	7.43	22.26	10.69	8.3	7.68
4/5/2012	NC070SW	14.5	25723	7.39	22.27	10.67	8	7.68
4/5/2012	NC070SW	15.5	25724	7.36	22.27	10.66	7.5	7.68
4/5/2012	NC070SW	16.5	25721	7.32	22.27	10.67	7.7	7.68
4/2/2012	NC079SW	0.5	22742	8.38	19.76	10.01	6.6	7.33
4/2/2012	NC079SW	1.5	22713	8.38	18.92	10.03	7.3	7.45
4/2/2012	NC079SW	2.5	22451	8.4	19.46	10.1	6.6	7.55
4/2/2012	NC079SW	3.5	22773	8.48	19.85	9.98	6.3	7.61
4/2/2012	NC079SW	4.5	23062	8.35	20.05	10.12	6.5	7.62
4/2/2012	NC079SW	5.5	23905	7.9	20.74	10.23	5.8	7.61
4/2/2012	NC079SW	6.5	24692	7.37	21.3	10.25	5.2	7.58
4/2/2012	NC079SW	7.5	24867	6.89	21.73	10.26	4.9	7.54
4/2/2012	NC079SW	8.5	25437	5.93	22.16	10.42	4.3	7.49
4/2/2012	NC079SW	9.5	25472	5.6	22.1	10.38	4.2	7.47
4/2/2012	NC079SW	10.5	25565	4.87	22.37	10.3	5	7.4
4/2/2012	NC079SW	11.5	25588	4.65	22.37	10.27	4.8	7.38
4/2/2012	NC079SW	12.5	25660	4.78	22.47	10.26	4.6	7.41
4/2/2012	NC079SW	13.5	25628	5.08	22.42	10.26	4.5	7.44
4/2/2012	NC079SW	14.5	25654	5.26	22.47	10.24	4.5	7.46
4/2/2012	NC079SW	15.5	25674	5.31	22.49	10.23	4.6	7.46
4/2/2012	NC079SW	16.5	25691	5.29	22.52	10.22	4.9	7.46
4/2/2012	NC079SW	17.5	25753	5.24	22.52	10.22	5.3	7.45
4/2/2012	NC079SW	18.5	25733	5.22	22.54	10.23	4.9	7.46
Whale Creek								
4/3/2012	WC001SW	0.5	25516	9.04	21.76	11.26	3.9	7.92
4/3/2012	WC001SW	1.5	25445	8.99	21.78	11.1	4.1	7.89
4/3/2012	WC001SW	2.5	25397	8.97	21.83	10.92	4.2	7.87
4/3/2012	WC001SW	3.5	25382	8.91	21.85	10.79	4.4	7.85
4/3/2012	WC001SW	4.5	25390	8.86	21.86	10.9	4.2	7.83
4/3/2012	WC001SW	5.5	25355	8.81	21.88	10.75	4.1	7.83
4/3/2012	WC001SW	6.5	25370	8.76	21.92	10.71	4.2	7.82
4/3/2012	WC001SW	7.5	25339	8.68	22.05	10.37	4.4	7.8
4/3/2012	WC001SW	8.5	25332	8.57	22.25	10.24	4.4	7.79
4/3/2012	WC001SW	9.5	25370	8.4	22.34	10.04	4.4	7.77
4/3/2012	WC001SW	10.5	25430	8.3	22.44	10.01	4.6	7.76
4/3/2012	WC001SW	11.5	25496	8.21	22.51	9.96	4.5	7.75
4/3/2012	WC001SW	12.5	25511	8.14	22.53	9.95	4.4	7.74
4/3/2012	WC001SW	13.5	25570	8.12	22.62	9.93	4.7	7.75
4/3/2012	WC001SW	14.5	25654	8.14	22.68	9.9	4.9	7.75

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
4/3/2012	WC001SW	15.5	25725	8.21	22.79	9.85	4.9	7.76
4/3/2012	WC001SW	16.5	25756	8.26	22.87	9.83	5	7.77
4/3/2012	WC001SW	17.5	25817	8.22	22.93	9.78	5	7.76
4/3/2012	WC001SW	18.5	25862	8.28	22.97	9.73	5.6	7.77
4/3/2012	WC001SW	19.5	25880	8.29	23.03	9.72	5.8	7.77
4/3/2012	WC001SW	20.5	25890	8.31	23.03	9.71	5.9	7.77
4/3/2012	WC001SW	21.5	25902	8.36	23.05	9.69	6.7	7.78
4/8/2012	WC001SW	0.5	26919	9.63	23.3	10.82	5.1	7.95
4/8/2012	WC001SW	1.5	26939	9.61	23.29	10.87	5	7.94
4/8/2012	WC001SW	2.5	26944	9.6	23.3	10.88	5.3	7.94
4/8/2012	WC001SW	3.5	26927	9.59	23.31	10.85	5.2	7.94
4/8/2012	WC001SW	4.5	26923	9.58	23.32	10.82	5.2	7.94
4/8/2012	WC001SW	5.5	26910	9.53	23.37	10.8	5.3	7.93
4/8/2012	WC001SW	6.5	26915	9.51	23.35	10.76	5.5	7.93
4/8/2012	WC001SW	7.5	26928	9.45	23.49	10.6	5.5	7.93
4/8/2012	WC001SW	8.5	26945	9.42	23.59	10.57	5.5	7.93
4/8/2012	WC001SW	9.5	27022	9.27	23.79	10.24	5.2	7.92
4/8/2012	WC001SW	10.5	27004	9.22	23.77	10.22	6.1	7.92
4/8/2012	WC001SW	11.5	27042	9.19	23.87	10.16	6	7.92
4/8/2012	WC001SW	12.5	27065	9.16	23.94	10.1	5.6	7.92
4/8/2012	WC001SW	13.5	27139	9.17	24.01	10.06	6.2	7.93
4/8/2012	WC001SW	14.5	27138	9.18	24.02	10.06	6.4	7.93
4/8/2012	WC001SW	15.5	27188	9.18	24.08	10.03	6	7.93
4/8/2012	WC001SW	16.5	27190	9.19	24.07	10.03	6	7.94
4/8/2012	WC001SW	17.5	27187	9.18	24.08	10.04	5.8	7.94
4/8/2012	WC001SW	18.5	27227	9.18	24.14	10.02	6.6	7.94
4/8/2012	WC001SW	19.5	27278	9.18	24.18	10	6.2	7.94
4/8/2012	WC001SW	20.5	27284	9.18	24.18	10.01	5.7	7.94
4/8/2012	WC001SW	21.5	27305	9.22	24.21	10.01	5.8	7.95
4/8/2012	WC001SW	22.5	27290	9.2	24.21	10	6	7.94
4/8/2012	WC001SW	23.5	27336	9.21	24.24	10	6	7.95
4/8/2012	WC001SW	24.5	27325	9.21	24.22	9.99	6.1	7.95
Event 4 – May 2012								
Dutch Kills								
5/9/2012	DK001SW	0.5	23024	6.59	16.65	15.94	7.8	7.33
5/9/2012	DK001SW	1.5	27859	7.06	21.88	14.26	5.7	7.43
5/9/2012	DK001SW	2.5	28162	7.79	22.41	14.24	4.7	7.15
5/9/2012	DK001SW	3.5	28343	8.16	22.41	14.2	3.7	7.54
5/9/2012	DK001SW	4.5	28426	8.2	22.67	14.13	3.8	7.55
5/9/2012	DK001SW	5.5	28534	7.84	22.86	13.99	3.5	7.5
5/9/2012	DK001SW	6.5	28559	7.52	22.9	13.95	3.2	7.47

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
5/9/2012	DK001SW	7.5	28564	7.31	22.91	13.94	3.3	7.45
5/9/2012	DK001SW	8.5	28562	7.23	22.88	13.94	3.1	7.44
5/9/2012	DK001SW	9.5	28576	7.05	22.92	13.87	3.1	7.43
5/9/2012	DK001SW	10.5	28572	7.03	22.13	13.88	3	7.43
5/9/2012	DK001SW	11.5	28589	6.92	22.98	13.83	3.1	7.43
5/9/2012	DK001SW	12.5	28604	6.89	23.03	13.81	3.4	7.43
5/9/2012	DK001SW	13.5	28615	6.96	23.06	13.76	3.8	7.44
5/9/2012	DK001SW	14.5	28635	6.92	23.1	13.72	4.1	7.44
5/9/2012	DK001SW	15.5	28642	6.95	23.11	13.71	4.1	7.44
5/9/2012	DK001SW	16.5	28660	6.96	23.14	13.7	4.4	7.45
5/9/2012	DK001SW	17.5	28695	6.96	23.2	13.66	4.4	7.45
5/9/2012	DK001SW	18.5	28714	6.96	23.22	13.63	4.7	7.45
5/9/2012	DK001SW	19.5	28719	6.93	23.24	13.63	4.6	7.45
5/11/2012	DK011SW	0.5	22304	10.92	17.85	12.74	2.8	7.79
5/11/2012	DK011SW	1.5	22519	11.08	18.01	12.79	2.6	7.82
5/11/2012	DK011SW	2.5	23924	13.18	18.94	13.81	4.9	7.97
5/11/2012	DK011SW	3.5	27225	13.06	21.16	15.16	3.8	7.95
5/11/2012	DK011SW	4.5	27892	10.49	21.65	15.12	2.6	7.67
5/11/2012	DK011SW	5.5	28085	7.97	21.98	14.83	3.4	7.42
5/11/2012	DK011SW	6.5	28230	4.33	22.24	14.51	2.7	7.16
5/11/2012	DK011SW	7.5	28256	3.98	22.35	14.43	2.1	7.12
5/11/2012	DK011SW	8.5	28340	3.03	22.36	14.38	2.5	7.07
5/11/2012	DK011SW	9.5	28585	1.55	22.75	14.26	24.3	6.97
5/11/2012	DK011SW	10.5	28689	0.82	23	13.97	20.6	6.91
5/11/2012	DK011SW	11.5	28627	0.59	23.07	13.81	16.1	6.88
East Branch								
5/8/2012	EB010SW	0.5	28164	0.46	22.65	13.74	44.5	6.97
5/8/2012	EB010SW	1.5	28133	0.37	22.64	13.74	41.9	6.97
5/8/2012	EB010SW	2.5	28071	0.32	22.7	13.6	37.9	6.95
5/8/2012	EB010SW	3.5	28080	0.68	22.71	13.52	31.7	6.99
5/8/2012	EB010SW	4.5	28095	0.63	22.73	13.53	32.7	6.99
5/8/2012	EB010SW	5.5	28107	0.77	22.76	13.5	34.4	7
English Kills								
5/10/2012	EK006SW	0.5	26703	9.75	20.46	14.95	2.8	7.75
5/10/2012	EK006SW	1.5	26765	9.88	20.66	14.94	2.9	7.75
5/10/2012	EK006SW	2.5	27739	10.04	21.65	14.91	3.1	7.75
5/10/2012	EK006SW	3.5	27927	10.28	21.84	14.91	3.5	7.77
5/10/2012	EK006SW	4.5	28071	10.06	21.9	14.86	3.2	7.7
5/10/2012	EK006SW	5.5	28396	8.02	22.53	14.22	1.9	7.43
5/10/2012	EK006SW	6.5	28394	5.66	22.66	14.12	1.7	7.26
5/10/2012	EK006SW	7.5	28392	4.89	22.68	14.06	1.6	7.21

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
5/10/2012	EK006SW	8.5	28388	4.51	22.7	14.04	1.5	7.18
5/10/2012	EK006SW	9.5	28410	4.28	22.73	14.01	1.4	7.17
5/10/2012	EK006SW	10.5	28405	3.87	22.74	13.98	1.4	7.15
5/10/2012	EK006SW	11.5	28414	3.82	22.76	13.96	1.5	7.15
5/10/2012	EK006SW	12.5	28426	3.8	22.77	13.96	1.4	7.15
5/10/2012	EK006SW	13.5	28435	3.8	22.79	13.96	1.6	7.15
5/10/2012	EK006SW	14.5	28454	3.84	22.79	13.96	1.4	7.15
5/10/2012	EK006SW	15.5	28459	3.82	22.8	13.96	1.5	7.15
5/10/2012	EK006SW	16.5	28469	3.8	22.81	13.95	1.4	7.15
5/8/2012	EK014SW	0.5	27716	4.68	22.39	13.54	4	7.17
5/8/2012	EK014SW	1.5	27726	4.63	22.4	13.53	3.9	7.17
5/8/2012	EK014SW	2.5	27735	4.59	22.4	13.52	4	7.17
5/8/2012	EK014SW	3.5	27739	4.6	22.42	13.53	3.9	7.17
5/8/2012	EK014SW	4.5	27774	4.43	22.5	13.52	3.6	7.17
5/8/2012	EK014SW	5.5	27937	4.02	22.52	13.5	3.4	7.15
5/8/2012	EK014SW	6.5	27965	3.72	22.67	13.5	3	7.13
5/8/2012	EK014SW	7.5	28031	3.44	22.7	13.49	3.1	7.12
5/10/2012	EK022SW	0.5	13807	2.05	9.38	17.05	24.4	7.33
5/10/2012	EK022SW	1.5	25204	2.27	19.08	15.25	21	7.13
5/10/2012	EK022SW	2.5	26751	3.63	20.88	14.95	12.8	7.18
5/10/2012	EK022SW	3.5	27475	3.37	21.66	14.46	14.3	7.16
5/10/2012	EK022SW	4.5	27738	3.24	21.94	14.45	19.1	7.16
5/10/2012	EK022SW	5.5	27901	3.14	22.08	14.4	13.3	7.13
Maspeth Creek								
5/11/2012	MC008SW	0.5	14695	2.92	11.39	17.89	23.7	7.38
5/11/2012	MC008SW	1.5	23732	4.29	18.1	16.52	21.7	7.38
5/11/2012	MC008SW	2.5	25994	6.78	19.56	16.15	10.8	7.58
Newtown Creek								
5/6/2012	NC007SW	0.5	39941	6.85	34	13	9.5	7.37
5/6/2012	NC007SW	1.5	39942	6.84	34.04	12.99	8.8	7.42
5/6/2012	NC007SW	2.5	40006	6.8	34.09	12.97	11.5	7.43
5/6/2012	NC007SW	3.5	40012	6.79	34.15	12.97	11.5	7.45
5/6/2012	NC007SW	4.5	40078	6.78	34.19	12.95	12.3	7.46
5/6/2012	NC007SW	5.5	40058	6.77	34.17	12.96	12.2	7.46
5/6/2012	NC007SW	6.5	40049	6.77	34.16	12.96	11.4	7.47
5/6/2012	NC007SW	7.5	40055	6.77	34.19	12.96	11.7	7.47
5/6/2012	NC007SW	8.5	40133	6.75	34.25	12.95	10.4	7.46
5/6/2012	NC007SW	9.5	40165	6.73	34.3	12.95	11.9	7.47
5/6/2012	NC007SW	10.5	40181	6.71	34.3	12.95	12.1	7.47
5/6/2012	NC007SW	11.5	40207	6.7	34.32	12.95	11.7	7.47
5/6/2012	NC007SW	12.5	40191	6.7	34.31	12.95	11.3	7.47

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
5/6/2012	NC007SW	13.5	40220	6.7	34.33	12.95	11.6	7.47
5/6/2012	NC007SW	14.5	40263	6.69	34.44	12.94	11.3	7.47
5/6/2012	NC007SW	15.5	40694	6.61	34.81	12.93	11.2	7.45
5/6/2012	NC007SW	16.5	41103	6.57	35.16	12.91	10.5	7.45
5/6/2012	NC007SW	17.5	41883	6.49	34.95	12.88	8.8	7.44
5/6/2012	NC020SW	0.5	41915	5.65	34.57	14.36	1.1	7.28
5/6/2012	NC020SW	1.5	41890	5.54	34.56	14.45	1.3	7.27
5/6/2012	NC020SW	2.5	41880	5.49	34.55	14.43	1.2	7.28
5/6/2012	NC020SW	3.5	41863	5.46	34.57	14.4	1.2	7.28
5/6/2012	NC020SW	4.5	41874	5.46	34.63	14.31	1.4	7.29
5/6/2012	NC020SW	5.5	41842	5.46	34.67	14.27	1.4	7.29
5/6/2012	NC020SW	6.5	41849	5.48	34.77	14.17	1.4	7.3
5/6/2012	NC020SW	7.5	41831	5.57	35	13.86	1.5	7.31
5/6/2012	NC020SW	8.5	41822	5.58	34.95	13.89	1.8	7.31
5/6/2012	NC020SW	9.5	41770	5.68	35.21	13.57	2	7.34
5/6/2012	NC020SW	10.5	41779	5.75	35.25	13.54	2.1	7.35
5/6/2012	NC020SW	11.5	41872	5.85	35.41	13.34	2.5	7.37
5/6/2012	NC020SW	12.5	41980	5.99	35.77	13.2	2.5	7.39
5/6/2012	NC020SW	13.5	42000	6.03	35.86	13.17	2.5	7.39
5/6/2012	NC020SW	14.5	42044	6.05	35.92	13.14	2.9	7.4
5/6/2012	NC020SW	15.5	42106	6.08	35.99	13.1	2.8	7.4
5/6/2012	NC020SW	16.5	42118	6.11	36.03	13.07	2.9	7.41
5/6/2012	NC020SW	17.5	42222	6.15	36.23	12.99	3.3	7.42
5/6/2012	NC020SW	18.5	42260	6.15	36.28	12.97	3.3	7.42
5/7/2012	NC034SW	0.5	28611	6.52	22.65	14.46	1.5	7.41
5/7/2012	NC034SW	1.5	28622	6.49	22.65	14.4	1.7	7.41
5/7/2012	NC034SW	2.5	28669	6.49	22.78	14.31	1.9	7.41
5/7/2012	NC034SW	3.5	28714	6.5	22.84	14.25	2	7.41
5/7/2012	NC034SW	4.5	28730	6.49	22.87	14.24	1.9	7.41
5/7/2012	NC034SW	5.5	28742	6.49	22.89	14.23	2	7.42
5/7/2012	NC034SW	6.5	28743	6.48	22.92	14.18	2.1	7.42
5/7/2012	NC034SW	7.5	28710	6.52	23.02	13.97	2.5	7.43
5/7/2012	NC034SW	8.5	28695	6.53	23.04	13.9	2.6	7.43
5/7/2012	NC034SW	9.5	28678	6.53	23.1	13.75	3.1	7.43
5/7/2012	NC034SW	10.5	28679	6.51	23.2	13.64	3.2	7.43
5/7/2012	NC034SW	11.5	28687	6.51	23.24	13.54	3.7	7.43
5/7/2012	NC034SW	12.5	28689	6.51	23.25	13.54	3.8	7.43
5/7/2012	NC034SW	13.5	28692	6.5	23.26	13.51	3.8	7.43
5/7/2012	NC034SW	14.5	28701	6.5	23.29	13.49	4	7.44
5/7/2012	NC034SW	15.5	28709	6.51	23.33	13.45	4.1	7.41
5/7/2012	NC034SW	16.5	28717	6.51	23.37	13.38	4.4	7.44

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
5/7/2012	NC034SW	17.5	28711	6.51	23.37	13.38	4.6	7.44
5/7/2012	NC034SW	18.5	28718	6.51	23.38	13.36	4.4	7.44
5/7/2012	NC034SW	19.5	28721	6.49	23.39	13.36	5.1	7.44
5/10/2012	NC046SW	0.5	28028	9	21.95	14.78	2.9	7.64
5/10/2012	NC046SW	1.5	28027	9.03	21.94	14.77	2.9	7.65
5/10/2012	NC046SW	2.5	28044	9.05	21.96	14.79	3	7.65
5/10/2012	NC046SW	3.5	28048	9.07	21.97	14.78	3	7.65
5/10/2012	NC046SW	4.5	28045	9.05	21.97	14.78	2.9	7.65
5/10/2012	NC046SW	5.5	28051	8.95	22.02	14.72	3	7.63
5/10/2012	NC046SW	6.5	28088	8.59	22.09	14.61	2.9	7.57
5/10/2012	NC046SW	7.5	28276	6.81	22.62	14.02	2.3	7.38
5/10/2012	NC046SW	8.5	28279	6.48	22.64	13.98	2.4	7.36
5/10/2012	NC046SW	9.5	28300	6.35	22.66	13.95	2.4	7.25
5/10/2012	NC046SW	10.5	28322	6.2	22.69	13.95	2.4	7.34
5/10/2012	NC046SW	11.5	28334	6.21	22.71	13.32	2.7	7.35
5/10/2012	NC046SW	12.5	28351	6.21	22.73	13.92	2.7	7.35
5/10/2012	NC046SW	13.5	28358	6.19	22.74	13.91	2.7	7.35
5/10/2012	NC046SW	14.5	28364	6.16	22.75	13.91	2.7	7.35
5/10/2012	NC046SW	15.5	28385	6.05	22.77	13.9	2.9	7.34
5/10/2012	NC046SW	16.5	28399	5.98	22.78	13.9	3.2	7.33
5/10/2012	NC046SW	17.5	28400	5.92	22.78	13.9	3	7.33
5/10/2012	NC046SW	18.5	28404	5.88	22.78	13.9	3.3	7.33
5/10/2012	NC046SW	19.5	28408	5.84	22.78	13.9	3.4	7.33
5/10/2012	NC046SW	20.5	28407	5.2	22.78	13.91	3	7.32
5/10/2012	NC046SW	21.5	28410	5.81	22.79	13.9	3.2	7.32
5/10/2012	NC046SW	22.5	28417	5.77	22.79	13.91	3.9	7.32
5/10/2012	NC046SW	23.5	28419	5.75	22.79	13.91	3.1	7.32
5/10/2012	NC046SW	24.5	28422	5.72	22.79	13.91	3.3	7.32
5/7/2012	NC068SW	0.5	28344	5.82	22.18	14.85	1.8	7.32
5/7/2012	NC068SW	1.5	28385	5.86	22.22	14.73	1.7	7.33
5/7/2012	NC068SW	2.5	28439	6.05	22.4	14.62	1.2	7.35
5/7/2012	NC068SW	3.5	28409	6.15	22.45	14.5	1.4	7.35
5/7/2012	NC068SW	4.5	28390	6.2	22.47	14.39	1.4	7.36
5/7/2012	NC068SW	5.5	28370	6.29	22.49	14.34	1.6	7.37
5/7/2012	NC068SW	6.5	28232	6.6	22.52	14.05	2.5	7.41
5/7/2012	NC068SW	7.5	28227	6.7	22.64	13.92	2.3	7.42
5/7/2012	NC068SW	8.5	28220	5.8	22.78	13.62	1.7	7.32
5/7/2012	NC068SW	9.5	28242	4.92	22.87	13.51	1.8	7.27
5/7/2012	NC068SW	10.5	28244	4.67	22.9	13.49	1.9	7.24
5/7/2012	NC068SW	11.5	28250	4.4	22.94	13.41	2	7.22
5/7/2012	NC068SW	12.5	28287	4.53	22.96	13.43	2.4	7.23

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
5/7/2012	NC068SW	13.5	28285	4.54	22.97	13.41	2.4	7.23
5/7/2012	NC068SW	14.5	28279	4.4	22.97	13.4	2.4	7.22
5/7/2012	NC068SW	15.5	28288	4.53	22.98	13.4	2	7.24
5/7/2012	NC068SW	16.5	28302	4.58	23.01	13.39	1.8	7.24
5/7/2012	NC068SW	17.5	28308	4.54	23.02	13.37	1.7	7.23
5/7/2012	NC068SW	18.5	28323	4.61	23.03	13.36	2.1	7.24
5/9/2012	NC070SW	0.5	27046	6.7	21.32	14.4	6.6	7.35
5/9/2012	NC070SW	1.5	27370	6.47	21.56	14.35	4.4	7.33
5/9/2012	NC070SW	2.5	28113	6.35	22.4	14.19	3.1	7.32
5/9/2012	NC070SW	3.5	28224	6.32	22.51	14.15	2.6	7.33
5/9/2012	NC070SW	4.5	28319	6.39	22.59	14.1	2.6	7.34
5/9/2012	NC070SW	5.5	28359	6.42	22.64	14.09	2.2	7.34
5/9/2012	NC070SW	6.5	28371	6.42	22.65	14.08	2.1	7.35
5/9/2012	NC070SW	7.5	28405	6.41	22.7	14.06	2.4	7.35
5/9/2012	NC070SW	8.5	28425	6.39	22.74	14.04	2.9	7.35
5/9/2012	NC070SW	9.5	28456	6.39	22.75	14.02	2.6	7.35
5/9/2012	NC070SW	10.5	28467	6.39	22.77	14.01	2.3	7.35
5/9/2012	NC070SW	11.5	28477	6.37	22.8	14	2.4	7.35
5/9/2012	NC070SW	12.5	28494	6.32	22.82	13.99	2.1	7.34
5/9/2012	NC070SW	13.5	28504	6.28	22.83	13.98	2	7.34
5/9/2012	NC070SW	14.5	28508	6.25	22.83	13.97	2.2	7.34
5/9/2012	NC070SW	15.5	28511	6.2	22.84	13.97	2.7	7.33
5/9/2012	NC070SW	16.5	28514	6.15	22.84	13.97	2.1	7.33
5/9/2012	NC079SW	0.5	21387	5.92	14.93	15.73	14.5	7.31
5/9/2012	NC079SW	1.5	24320	5.62	21.69	15.07	3.9	7.25
5/9/2012	NC079SW	2.5	28245	5.57	22.59	14.12	2.7	7.27
5/9/2012	NC079SW	3.5	28380	5.59	22.64	14.11	1.9	7.28
5/9/2012	NC079SW	4.5	28391	5.59	22.65	14.11	1.7	7.28
5/9/2012	NC079SW	5.5	28396	5.59	22.67	14.1	1.7	7.28
5/9/2012	NC079SW	6.5	28412	5.58	22.69	14.07	1.4	7.28
5/9/2012	NC079SW	7.5	28424	5.59	22.73	14.07	1.3	7.28
5/9/2012	NC079SW	8.5	28442	5.59	22.74	14.04	1.2	7.29
5/9/2012	NC079SW	9.5	28445	5.55	22.74	14.03	1.4	7.28
5/9/2012	NC079SW	10.5	28444	5.55	22.75	14.03	1.2	7.28
5/9/2012	NC079SW	11.5	28448	5.56	22.75	14.02	1.2	7.28
5/9/2012	NC079SW	12.5	28455	5.56	22.76	14.02	1.2	7.29
5/9/2012	NC079SW	13.5	28459	5.5	22.78	14.01	1.3	7.28
5/9/2012	NC079SW	14.5	28466	5.47	22.79	13.98	1.2	7.28
5/9/2012	NC079SW	15.5	28476	5.47	22.81	13.97	1.3	7.28
5/9/2012	NC079SW	16.5	28481	5.4	22.82	13.96	1.4	7.27
5/9/2012	NC079SW	17.5	28476	5.35	22.82	13.95	1.4	7.27

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
5/9/2012	NC079SW	18.5	28478	5.34	22.82	13.95	1.3	7.27
5/9/2012	NC079SW	19.5	28478	5.31	22.83	13.94	1.4	7.27
5/9/2012	NC079SW	20.5	28477	5.27	22.82	13.94	1.5	7.27
5/9/2012	NC079SW	21.5	28484	5.27	22.84	13.93	1.5	7.27
Whale Creek								
5/7/2012	WC001SW	0.5	28228	6.4	22.69	13.76	1.3	7.41
5/7/2012	WC001SW	1.5	28207	6.39	22.66	13.79	1	7.41
5/7/2012	WC001SW	2.5	28247	6.29	22.75	13.75	1.5	7.4
5/7/2012	WC001SW	3.5	28392	6.32	22.96	13.6	2.9	7.4
5/7/2012	WC001SW	4.5	28390	6.35	22.97	13.59	3.2	7.41
5/7/2012	WC001SW	5.5	28404	6.35	23.01	13.54	3.5	7.41
5/7/2012	WC001SW	6.5	28444	6.33	23.07	13.45	3.9	7.41
5/7/2012	WC001SW	7.5	28466	6.33	23.09	13.48	4.1	7.41
5/7/2012	WC001SW	8.5	28475	6.35	23.11	13.47	4	7.41
5/7/2012	WC001SW	9.5	28489	6.38	23.12	13.45	4.5	7.42
5/7/2012	WC001SW	10.5	28488	6.4	23.13	13.45	4.4	7.42
5/7/2012	WC001SW	11.5	28492	6.42	23.14	13.44	4.9	7.42
5/7/2012	WC001SW	12.5	28506	6.45	23.16	13.42	4.5	7.42
5/7/2012	WC001SW	13.5	28530	6.47	23.2	13.39	4.8	7.43
5/7/2012	WC001SW	14.5	28547	6.47	24.24	13.35	5.1	7.43
5/7/2012	WC001SW	15.5	28547	6.46	23.24	13.35	5.5	7.43
5/7/2012	WC001SW	16.5	28562	6.48	23.28	13.34	7	7.43
5/7/2012	WC001SW	17.5	28560	6.48	23.29	13.33	6.3	7.43
5/7/2012	WC001SW	18.5	28582	6.51	23.32	13.27	6.9	7.44
5/7/2012	WC001SW	19.5	28638	6.59	23.4	13.2	7.8	7.45
5/7/2012	WC001SW	20.5	28640	6.62	23.44	13.2	7.7	7.45
5/7/2012	WC001SW	21.5	28718	6.68	23.54	13.14	8.6	7.46
5/7/2012	WC001SW	22.5	28725	6.72	23.55	13.13	9	7.47
5/7/2012	WC001SW	23.5	28750	6.73	23.57	13.11	9.8	7.47
5/7/2012	WC001SW	24.5	28743	6.71	23.56	13.11	9.5	7.47
Event 5 – June 2012								
Dutch Kills								
6/4/2012	DK001SW	0.5	24298	9.72	16.64	20.38	4.7	7.84
6/4/2012	DK001SW	1.5	25357	11.18	17.19	20.32	5.1	8.1
6/4/2012	DK001SW	2.5	28166	10.42	19.49	19.87	3.9	7.9
6/4/2012	DK001SW	3.5	29168	8.81	20.57	19.78	3.2	7.72
6/4/2012	DK001SW	4.5	29973	7.49	21	19.69	2.4	7.54
6/4/2012	DK001SW	5.5	30604	6.15	21.53	19.64	3.5	7.42
6/4/2012	DK001SW	6.5	31155	5.45	21.93	19.55	3.1	7.37
6/4/2012	DK001SW	7.5	31467	5.42	22.28	19.39	2.7	7.4
6/4/2012	DK001SW	8.5	31907	5.39	22.73	19.27	2.8	7.41

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
6/4/2012	DK001SW	9.5	32032	5.29	22.8	19.25	3.1	7.4
6/4/2012	DK001SW	10.5	32257	5.14	23	19.21	3.4	7.39
6/4/2012	DK001SW	11.5	32329	5.17	23.04	19.19	3.4	7.4
6/4/2012	DK001SW	12.5	32420	5.24	23.16	19.14	3.5	7.41
6/4/2012	DK001SW	13.5	32581	5.28	23.28	19.09	3.7	7.42
6/4/2012	DK001SW	14.5	32630	5.27	23.34	19.07	3.2	7.42
6/4/2012	DK001SW	15.5	32785	5.29	23.42	19.03	3.8	7.42
6/6/2012	DK011SW	0.5	24103	10.05	15.98	20.53	6	7.38
6/6/2012	DK011SW	1.5	30798	16.19	20.78	21.31	4.7	8.52
6/6/2012	DK011SW	2.5	30957	16.59	21.35	20.15	5.7	8.33
6/6/2012	DK011SW	3.5	30825	15.35	21.65	20.2	5.4	7.94
6/6/2012	DK011SW	4.5	30982	1.2	21.9	19.35	14.4	6.97
6/6/2012	DK011SW	5.5	31399	0.66	22.25	19.32	24.8	6.98
6/6/2012	DK011SW	6.5	31581	0.52	22.43	19.29	23.1	6.94
6/6/2012	DK011SW	7.5	31674	0.46	22.57	19.2	25.2	6.89
6/6/2012	DK011SW	8.5	31692	0.4	22.67	19	26.2	6.93
6/6/2012	DK011SW	9.5	31784	0.34	22.74	18.95	23.7	6.81
6/6/2012	DK011SW	10.5	31860	0.3	22.82	18.94	20	6.74
6/6/2012	DK011SW	11.5	31876	0.26	22.87	18.83	23.8	6.8
6/6/2012	DK011SW	12.5	31930	0.25	22.96	18.78	28.9	6.86
6/6/2012	DK011SW	13.5	32004	0.24	23.04	18.27	32	6.96
6/6/2012	DK011SW	14.5	32013	0.24	23.06	18.69	31.4	6.91
East Branch								
6/6/2012	EB010SW	0.5	11789	7.1	7.44	20.75	32.2	6.88
6/6/2012	EB010SW	1.5	27649	5.4	19.33	19.62	18.3	6.65
6/6/2012	EB010SW	2.5	29774	4.6	20.72	20.01	17.4	6.72
6/6/2012	EB010SW	3.5	30268	4.2	21.26	19.74	15.2	6.77
English Kills								
6/8/2012	EK006SW	0.5	29940	18.17	20.42	20.57	11.2	8.39
6/8/2012	EK006SW	1.5	30187	14.74	21.16	19.66	6.1	7.65
6/8/2012	EK006SW	2.5	30628	11.71	21.56	19.55	3.4	7.48
6/8/2012	EK006SW	3.5	30769	8.55	21.68	19.43	2.9	7.51
6/8/2012	EK006SW	4.5	30872	8.61	21.77	19.43	2.8	7.41
6/8/2012	EK006SW	5.5	30930	8.05	21.81	19.44	2.8	7.31
6/8/2012	EK006SW	6.5	30978	7.5	21.85	19.43	2.8	7.26
6/8/2012	EK006SW	7.5	31044	6.76	21.91	19.4	3.2	7.2
6/8/2012	EK006SW	8.5	31061	6.35	21.95	19.38	3.2	7.19
6/8/2012	EK006SW	9.5	31063	6.29	21.96	19.35	2.9	7.18
6/8/2012	EK006SW	10.5	31070	5.82	21.97	19.3	2.6	7.15
6/8/2012	EK006SW	11.5	31130	4.59	22.06	19.26	2.6	7.07
6/8/2012	EK006SW	12.5	31131	4.55	22.07	19.25	2.5	7.06

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Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
6/8/2012	EK006SW	13.5	31141	3.36	22.1	19.18	2.2	7
6/8/2012	EK006SW	14.5	31148	2.79	22.12	19.14	2	6.99
6/8/2012	EK006SW	15.5	31181	1.87	22.24	19	2.1	6.95
6/8/2012	EK006SW	16.5	31189	1.16	22.3	18.87	2.6	6.92
6/5/2012	EK014SW	0.5	29353	8.1	20.86	18.91	5.2	7.5
6/5/2012	EK014SW	1.5	29351	8.09	20.84	18.92	5.2	7.5
6/5/2012	EK014SW	2.5	29378	8.03	20.86	18.89	5	7.47
6/5/2012	EK014SW	3.5	29301	8.15	20.79	18.91	5.3	7.5
6/5/2012	EK014SW	4.5	29299	8.14	20.81	18.9	5.3	7.49
6/5/2012	EK014SW	5.5	29325	8.03	20.87	18.92	4.9	7.5
6/5/2012	EK014SW	6.5	29546	7.74	21.02	18.87	4.5	7.46
6/5/2012	EK014SW	7.5	29573	7.64	21.04	18.87	4.5	7.46
6/5/2012	EK022SW	0.5	15921	9.5	10.94	18.08	12.5	7.71
6/5/2012	EK022SW	1.5	25511	7.66	18.12	18.86	26	7.39
6/5/2012	EK022SW	2.5	28108	3.35	19.96	18.85	51.1	7.12
6/5/2012	EK022SW	3.5	28512	3.1	20.23	18.85	40.1	7.11
Maspeth Creek								
6/7/2012	MC008SW	0.5	22151	5.45	13.32	23.94	28.2	7.32
6/7/2012	MC008SW	1.5	30177	13.66	20.96	20.33	8.8	8.01
6/7/2012	MC008SW	2.5	30440	11.01	21.3	19.73	14.2	7.55
6/7/2012	MC008SW	3.5	30495	8.31	21.41	19.56	13.7	7.52
6/7/2012	MC008SW	4.5	30517	8.2	21.44	19.53	13	7.54
Newtown Creek								
6/4/2012	NC007SW	0.5	29965	6.3	21.12	19.33	5.2	7.06
6/4/2012	NC007SW	1.5	29983	6.27	21.16	19.32	5.9	7.11
6/4/2012	NC007SW	2.5	30005	6.25	21.16	19.33	7.5	7.14
6/4/2012	NC007SW	3.5	30042	6.24	21.18	19.33	6.8	7.17
6/4/2012	NC007SW	4.5	30028	6.22	21.16	19.32	7.5	7.19
6/4/2012	NC007SW	5.5	30050	6.22	21.17	19.33	9.2	7.21
6/4/2012	NC007SW	6.5	30049	6.21	21.19	19.31	9.9	7.22
6/4/2012	NC007SW	7.5	30066	6.21	21.2	19.32	9.2	7.23
6/4/2012	NC007SW	8.5	30070	6.19	21.21	19.32	10.1	7.24
6/4/2012	NC007SW	9.5	30106	6.18	21.24	19.32	10.6	7.25
6/4/2012	NC007SW	10.5	30189	6.17	21.31	19.29	8.5	7.26
6/4/2012	NC007SW	11.5	30233	6.16	21.34	19.27	13.9	7.26
6/4/2012	NC007SW	12.5	30224	6.15	21.35	19.28	8.3	7.27
6/4/2012	NC007SW	13.5	30208	6.16	21.36	19.26	13.7	7.28
6/4/2012	NC007SW	14.5	30228	6.15	21.39	19.26	6.9	7.28
6/4/2012	NC007SW	15.5	30318	6.15	21.45	19.21	9.4	7.29
6/4/2012	NC007SW	16.5	30293	6.14	21.44	19.21	8.1	7.29
6/4/2012	NC007SW	17.5	30377	6.13	21.48	19.21	8.1	7.3

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
6/4/2012	NC007SW	18.5	30402	6.11	21.56	19.22	7.9	7.3
6/4/2012	NC007SW	19.5	30528	6.1	21.69	19.15	9.3	7.3
6/4/2012	NC020SW	0.5	22371	7.9	14.89	20.42	4.7	7.47
6/4/2012	NC020SW	1.5	22566	7.86	14.98	20.45	4.6	7.48
6/4/2012	NC020SW	2.5	25666	8.65	18.27	20.42	4.9	7.84
6/4/2012	NC020SW	3.5	27614	9.15	19.43	19.79	3.5	7.86
6/4/2012	NC020SW	4.5	28697	8.61	20.16	19.37	3	7.75
6/4/2012	NC020SW	5.5	29397	8.01	20.68	19.42	3	7.62
6/4/2012	NC020SW	6.5	30707	7.04	20.95	19.35	3.4	7.51
6/4/2012	NC020SW	7.5	31213	6.56	22.16	19.3	3	7.47
6/4/2012	NC020SW	8.5	31313	6.4	22.23	19.27	3.5	7.46
6/4/2012	NC020SW	9.5	31327	6.32	22.19	19.27	3.1	7.46
6/4/2012	NC020SW	10.5	31298	6.26	22.26	19.28	2.9	7.47
6/4/2012	NC020SW	11.5	31503	6.17	22.24	19.24	3.4	7.46
6/4/2012	NC020SW	12.5	31516	6.12	22.43	19.23	3.9	7.46
6/4/2012	NC020SW	13.5	31556	6.11	22.42	19.24	3.6	7.46
6/4/2012	NC020SW	14.5	31948	5.92	22.81	19.16	3.2	7.45
6/4/2012	NC020SW	15.5	32077	5.19	22.9	19.13	3.4	7.44
6/4/2012	NC020SW	16.5	32297	5.79	23.18	19.1	3.5	7.44
6/4/2012	NC020SW	17.5	32676	5.77	23.47	19.03	3.9	7.44
6/4/2012	NC020SW	18.5	32796	5.75	23.57	18.98	4	7.44
6/4/2012	NC020SW	19.5	32867	5.73	23.59	18.95	4.2	7.44
6/4/2012	NC020SW	20.5	32878	5.72	23.71	18.95	5.2	7.44
6/3/2012	NC034SW	0.5	27634	11.98	18.68	20.74	2.5	7.95
6/3/2012	NC034SW	1.5	27659	11.97	18.7	20.74	2.6	7.94
6/3/2012	NC034SW	2.5	27813	11.77	18.87	20.72	2.5	7.91
6/3/2012	NC034SW	3.5	28352	10.78	19.37	20.44	2.2	7.75
6/3/2012	NC034SW	4.5	28569	9.57	19.61	20.28	1.9	7.64
6/3/2012	NC034SW	5.5	28909	7.89	20.03	20.08	1.5	7.47
6/3/2012	NC034SW	6.5	29422	6.25	20.66	19.75	0.8	7.29
6/3/2012	NC034SW	7.5	30175	4.82	21.2	19.54	0.4	7.2
6/3/2012	NC034SW	8.5	30888	4.26	21.85	19.37	0.7	7.16
6/3/2012	NC034SW	9.5	31046	4.15	21.95	19.31	1.3	7.13
6/3/2012	NC034SW	10.5	31468	4.17	22.42	19.19	2.2	7.13
6/3/2012	NC034SW	11.5	31557	4.24	22.45	19.15	2	7.13
6/3/2012	NC034SW	12.5	31567	4.26	22.46	19.15	1.4	7.13
6/3/2012	NC034SW	13.5	31590	4.27	22.49	19.14	1.3	7.13
6/3/2012	NC034SW	14.5	31634	4.33	22.55	19.12	2.7	7.13
6/3/2012	NC034SW	15.5	31675	4.47	22.59	19.09	1.8	7.13
6/3/2012	NC034SW	16.5	31764	4.63	22.68	19.04	2.5	7.15
6/3/2012	NC034SW	17.5	31778	4.68	22.69	19.03	3.2	7.15

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
6/3/2012	NC034SW	18.5	31785	4.72	22.7	19.02	3.1	7.16
6/3/2012	NC034SW	19.5	31788	4.72	22.71	19.02	2.5	7.16
6/3/2012	NC046SW	0.5	24406	13.9	16.23	20.84	4.1	8.21
6/3/2012	NC046SW	1.5	25494	13.59	16.53	20.64	3.6	8.07
6/3/2012	NC046SW	2.5	26182	13.07	17.74	20.63	3.5	7.99
6/3/2012	NC046SW	3.5	28153	8.41	19.45	20.12	2.8	7.5
6/3/2012	NC046SW	4.5	29036	7.05	20.08	19.82	1.9	7.36
6/3/2012	NC046SW	5.5	29683	4.68	20.69	19.61	1.3	7.19
6/3/2012	NC046SW	6.5	30106	4.13	21.09	19.55	1.2	7.13
6/3/2012	NC046SW	7.5	30677	3.93	21.7	19.39	0.6	7.09
6/3/2012	NC046SW	8.5	31093	4.14	21.92	19.32	1.2	7.1
6/3/2012	NC046SW	9.5	31207	4.38	22.08	19.29	0.9	7.1
6/3/2012	NC046SW	10.5	31277	4.52	22.19	19.27	1.4	7.1
6/3/2012	NC046SW	11.5	31390	4.55	22.27	19.24	1.3	7.1
6/3/2012	NC046SW	12.5	31582	4.63	22.45	19.19	1.9	7.11
6/3/2012	NC046SW	13.5	31604	4.69	22.49	19.18	1.6	7.11
6/3/2012	NC046SW	14.5	31678	4.78	22.57	19.14	2.1	7.12
6/3/2012	NC046SW	15.5	31711	4.85	22.59	19.12	2.1	7.13
6/3/2012	NC046SW	16.5	31770	4.91	22.63	19.07	2.5	7.14
6/3/2012	NC046SW	17.5	31799	4.97	22.74	19.05	1.9	7.14
6/3/2012	NC046SW	18.5	31836	5.16	22.76	18.99	2.5	7.16
6/3/2012	NC046SW	19.5	31940	5.28	22.9	18.91	2.6	7.18
6/3/2012	NC046SW	20.5	31833	5.3	22.8	18.87	2.9	7.19
6/3/2012	NC046SW	21.5	31968	5.3	22.93	18.89	3.6	7.2
6/3/2012	NC068SW	0.5	18139	13.25	12.05	19.87	3.7	7.92
6/3/2012	NC068SW	1.5	25011	11.61	15.18	20.39	4	7.68
6/3/2012	NC068SW	2.5	27560	9.19	18.02	20.26	2.6	7.37
6/3/2012	NC068SW	3.5	27662	8.82	19.84	20.32	2.7	7.47
6/3/2012	NC068SW	4.5	28823	4.83	20.25	19.94	1.6	7.06
6/3/2012	NC068SW	5.5	29473	4.26	20.7	19.68	1.2	7
6/3/2012	NC068SW	6.5	29791	4.06	20.84	19.6	1.2	6.97
6/3/2012	NC068SW	7.5	29881	3.85	20.94	19.57	1.3	6.95
6/3/2012	NC068SW	8.5	30428	3.48	21.52	19.41	3.1	6.91
6/3/2012	NC068SW	9.5	31032	3.61	22	19.3	1.1	6.93
6/3/2012	NC068SW	10.5	31216	3.66	22.15	19.26	1.4	6.93
6/3/2012	NC068SW	11.5	31322	3.5	22.2	19.22	1.1	6.93
6/3/2012	NC068SW	12.5	31369	3.38	22.27	19.2	1.5	6.92
6/3/2012	NC068SW	13.5	31423	3.28	22.35	19.16	1.2	6.92
6/3/2012	NC068SW	14.5	31495	3.32	22.41	19.13	1.5	6.93
6/3/2012	NC068SW	15.5	31532	3.42	22.44	19.13	1.5	6.94
6/3/2012	NC068SW	16.5	31546	3.44	22.45	19.13	1.4	6.95

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
6/3/2012	NC068SW	17.5	31552	3.48	22.45	19.13	1.5	6.96
6/6/2012	NC070SW	0.5	29828	11.73	21.08	19.16	3.8	7.91
6/6/2012	NC070SW	1.5	29829	11.75	21.1	19.19	3.7	7.92
6/6/2012	NC070SW	2.5	29857	10.99	21.15	19	4.2	7.87
6/6/2012	NC070SW	3.5	29965	10.15	21.42	18.98	3.8	7.78
6/6/2012	NC070SW	4.5	30130	8.23	21.48	18.83	2.4	7.56
6/6/2012	NC070SW	5.5	30255	8.11	21.58	18.86	2.3	7.57
6/6/2012	NC070SW	6.5	30444	7.05	21.73	18.84	2.5	7.43
6/6/2012	NC070SW	7.5	30778	5.75	21.92	18.87	2.3	7.31
6/6/2012	NC070SW	8.5	30877	5.34	22.08	18.89	2.5	7.27
6/6/2012	NC070SW	9.5	31020	4.96	22.2	18.89	2.5	7.24
6/6/2012	NC070SW	10.5	31629	4.51	22.62	18.89	2.9	7.19
6/6/2012	NC070SW	11.5	31690	4.28	22.7	18.89	2.9	7.18
6/6/2012	NC070SW	12.5	31729	4.11	22.72	18.9	2.9	7.16
6/6/2012	NC070SW	13.5	31750	3.99	22.74	18.91	2.8	7.15
6/6/2012	NC070SW	14.5	31766	3.88	22.74	18.91	2.9	7.14
6/6/2012	NC070SW	15.5	31777	3.77	22.75	18.98	3.5	7.13
6/6/2012	NC070SW	16.5	31904	3.55	22.87	18.93	2.9	7.11
6/6/2012	NC070SW	17.5	31974	3.8	22.94	18.86	3.3	7.15
6/6/2012	NC070SW	18.5	31975	3.61	22.92	18.89	3.5	7.13
6/7/2012	NC079SW	0.5	29065	15.52	20.01	20.06	11.6	8.27
6/7/2012	NC079SW	1.5	29868	14.27	20.9	19.52	5.6	7.82
6/7/2012	NC079SW	2.5	29984	11.98	21.12	19.38	4.3	7.62
6/7/2012	NC079SW	3.5	30154	10.48	21.29	19.3	5.1	7.47
6/7/2012	NC079SW	4.5	30242	9.44	21.36	19.29	6	7.37
6/7/2012	NC079SW	5.5	30340	8.1	21.44	19.26	5.9	7.3
6/7/2012	NC079SW	6.5	30427	7.71	21.58	19.25	5.6	7.27
6/7/2012	NC079SW	7.5	30661	6.95	21.84	19.18	5.5	7.19
6/7/2012	NC079SW	8.5	31035	5.4	22.13	19.07	4.7	7.07
6/7/2012	NC079SW	9.5	31168	4.56	22.22	19.05	3.7	7.03
6/7/2012	NC079SW	10.5	31224	4.34	22.27	19.03	2.9	7.03
6/7/2012	NC079SW	11.5	31287	4.1	22.31	19.02	2.8	7.03
6/7/2012	NC079SW	12.5	31405	3.94	22.48	19.01	2.6	7.02
6/7/2012	NC079SW	13.5	31627	3.42	22.66	18.88	2.6	7
6/7/2012	NC079SW	14.5	31667	3.25	22.7	18.87	2.6	7
6/7/2012	NC079SW	15.5	31699	3.13	22.74	18.85	2.6	7
6/7/2012	NC079SW	16.5	31719	3.07	22.76	18.83	2.6	7
6/7/2012	NC079SW	17.5	31727	2.89	22.75	18.82	2.6	7
6/7/2012	NC079SW	18.5	31723	2.79	22.76	18.83	2.6	7
6/7/2012	NC079SW	19.5	31726	2.76	22.76	18.82	2.8	7

Table A3-1
Analytical Surface Water – Profile Data

Sample Date	Station ID	Sample Depth (ft)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	Salinity (ppth)	Temperature (deg C)	Turbidity (NTU)	pH (SU)
Whale Creek								
6/5/2012	WC001SW	0.5	30060	6.38	21.54	18.6	2.5	7.39
6/5/2012	WC001SW	1.5	30010	6.34	21.53	18.59	2.5	7.4
6/5/2012	WC001SW	2.5	30310	6.24	21.73	18.68	3.1	7.4
6/5/2012	WC001SW	3.5	30229	6.18	21.7	18.67	3	7.4
6/5/2012	WC001SW	4.5	30543	6.01	22.27	18.75	3.6	7.39
6/5/2012	WC001SW	5.5	31655	5.61	22.69	18.9	4.4	7.36
6/5/2012	WC001SW	6.5	31640	5.63	22.68	18.86	5.2	7.37
6/5/2012	WC001SW	7.5	31687	5.64	22.73	18.85	5.1	7.38
6/5/2012	WC001SW	8.5	31746	5.61	22.8	18.84	4.9	7.38
6/5/2012	WC001SW	9.5	31892	5.53	22.86	18.87	5.3	7.38
6/5/2012	WC001SW	10.5	31860	5.5	22.84	18.88	4.9	7.38
6/5/2012	WC001SW	11.5	32121	5.47	23.2	18.84	5.6	7.39
6/5/2012	WC001SW	12.5	32414	5.53	23.41	18.81	7.9	7.4
6/5/2012	WC001SW	13.5	32556	5.57	23.48	18.73	6.5	7.41
6/5/2012	WC001SW	14.5	32568	5.59	23.5	18.71	6.1	7.41
6/5/2012	WC001SW	15.5	32599	5.62	23.54	18.69	6.8	7.42
6/5/2012	WC001SW	16.5	32666	5.65	23.6	18.67	6.5	7.42
6/5/2012	WC001SW	17.5	32700	5.67	23.67	18.64	6.9	7.43
6/5/2012	WC001SW	18.5	32803	5.69	23.74	18.62	6.9	7.43
6/5/2012	WC001SW	19.5	32831	5.7	23.76	18.61	7.1	7.44
6/5/2012	WC001SW	20.5	32844	5.71	23.79	18.6	7.3	7.44
6/5/2012	WC001SW	21.5	32889	5.72	23.81	18.6	7.8	7.44
6/5/2012	WC001SW	22.5	32895	5.72	23.83	18.6	8.2	7.44

Notes:

µs/cm = microsiemen per centimeter

deg C = degree Celsius

FS = Feasibility Study

ft = foot

ID = identification

mg/L = microgram per liter

NTU = nephelometric turbidity unit

ppth = parts per thousand

RI = Remedial Investigation

SU = standard unit

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.91 DK001_20120212 DK001SW-A-20120212 2/12/2012 3.2 ft 17 ft N	Dutch Kills 0.91 DK001_20120212 DK001SW-C-20120212 2/12/2012 16.5 ft 17 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-A-20120323 3/23/2012 1 ft 20 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-C-20120323 3/23/2012 14 ft 20 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-A-20120406 4/6/2012 3 ft 22 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-C2-20120406 4/6/2012 14.5 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-A-20120509 5/9/2012 1 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-C-20120509 5/9/2012 20 ft 22 ft N
Water Quality Measurements								
Conductivity (µs/cm)	13946	14353	27055	25912	26146	26696	27366	28711
Dissolved Oxygen (mg/L)	13.3	11.52	18.23	10.98	8.61	9	7.92	6.85
pH (su)	7.96	7.76	8.55	8.1	7.82	7.9	7.55	7.45
Salinity (ppth)	13.5	13.9	22.09	22.85	22.77	23.56	18.78	23.21
Temperature (deg C)	4.83	4.9	12.6	9.99	10.64	10.09	14.57	13.65
Turbidity (NTU)	4.5	6.3	3.8	4.3	6.3	5.6	5.1	4.9
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	10	10	10	10	40	10	12500	1700
Coliforms, Total	60	20	150	20	850	60	20000	4000
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	99	97	110	99	100	97	97	97
Ammonia as nitrogen	0.472	0.45	0.017	0.329	0.382	0.401	0.654	0.495
Biochemical Oxygen Demand (BOD-30)	8.7	8.79	23.8	19.7	7.65	7.53	12.9	4.95
Biochemical Oxygen Demand (BOD-5)	2	2	8.07	3.46	6.81	7.92	5.13	2
Bromide	49	36	51	42	35	46	44	38
Chloride (total)	13000	14000	13000	12000	13000	15000	11000	14000
Cyanide, total	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Hardness	4900	5000	4500	4300	4300	4700	4300	4800
Nitrate + nitrite as nitrogen	0.5	0.46	0.13	0.34	0.34	0.29	3.8	0.47
Nitrogen (Kjeldahl)	0.78	0.1	0.91	0.75	0.77	0.68	1.4	0.86
Particulate Organic Carbon (POC)	1	1	2.52	1	1.17	1	1	1.8
Phosphorus	0.125	0.129	0.14	0.135	0.168	0.131	0.224	0.188
Sulfate	1600	1600	1400	1400	1600	1900	1300	1700
Suspended Sediment - coarse fraction	0	3.4156	1.52	2.21	3.13	6.38	1.3	1.36
Suspended Sediment - fine fraction	7.18	12.1	9.85	9.57	4.79	8.2	5.77	7.56
Total organic carbon	0.03	0.03	0.31	0.22	0.28	0.22	2	1
Total suspended solids	16	20	19	15	11	12	9.8	26
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	1	1	N/A	N/A	N/A	N/A	4	4
Nitrate + nitrite as nitrogen - Dissolved	0.5	0.46	0.14	0.35	0.35	0.3	0.47	0.49
Nitrogen (Kjeldahl) - Dissolved	0.71	0.73	0.2	0.47	0.68	0.54	0.87	0.7
Phosphorus - Dissolved	0.116	0.15	0.021	0.083	0.078	0.093	0.13	0.131
Total dissolved solids - Dissolved	22000	22000	22000	23000	23000	24000	21000	24000
Metals (µg/L)								
Aluminum	62	53	66	198	69	94	51	150

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.91 DK001_20120212 DK001SW-A-20120212 2/12/2012 3.2 ft 17 ft N	Dutch Kills 0.91 DK001_20120212 DK001SW-C-20120212 2/12/2012 16.5 ft 17 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-A-20120323 3/23/2012 1 ft 20 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-C-20120323 3/23/2012 14 ft 20 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-A-20120406 4/6/2012 3 ft 22 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-C2-20120406 4/6/2012 14.5 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-A-20120509 5/9/2012 1 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-C-20120509 5/9/2012 20 ft 22 ft N
Antimony	2.2	3.5	1.1	1.1	1.1	1.1	1.1	1.1
Arsenic	1.08	1.07	0.89	0.94	1	0.89	1.16	1.19
Barium	16.2	13.7	21	16.6	19.5	14.7	25.2	15
Beryllium	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	268000	264000	299000	279000	290000	315000	237000	254000
Chromium	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	2.3	2.1	1.1	1.1	2.9	2.8	4.4	2.7
Iron	203	155	253	355	272	243	277	435
Lead	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Magnesium	1040000	1040000	919000	867000	862000	951000	899000	1010000
Manganese	38.7	23.8	68.7	49.7	70.8	46.6	94.1	56.7
Mercury	0.00245	0.0044	0.00444	0.00722	0.00332	0.00455	0.00655	0.00837
Nickel	0.8	0.8	0.8	0.8	2.3	0.9	1.8	1.2
Potassium	460000	460000	313000	300000	211000	229000	245000	273000
Selenium	0.702	0.581	1.16	1.16	1.16	1.16	1.21	1.21
Silver	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	6810000	6840000	8010000	7610000	7440000	8180000	6260000	7040000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
Vanadium	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7
Zinc	13.2	11.9	11.9	11.9	19.6	11.9	13.9	11.9
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	20	20	20	20
Antimony	1.1	1.1	9.8	9.4	1.1	2.2	1.1	1.1
Arsenic	1.01	0.94	0.47	0.59	0.72	0.77	0.86	0.89
Barium	16.2	14.1	18.7	13.4	18	13.6	19.1	15.4
Beryllium	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	270000	276000	261000	269000	259000	260000	250000	247000
Chromium	2	1.8	1.5	1.5	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	1.1	2.7	1.1	1.1	1.5	1.3	1.9	1.1
Iron	125	125	125	125	125	125	132	173
Lead	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.91 DK001_20120212 DK001SW-A-20120212 2/12/2012 3.2 ft 17 ft N	Dutch Kills 0.91 DK001_20120212 DK001SW-C-20120212 2/12/2012 16.5 ft 17 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-A-20120323 3/23/2012 1 ft 20 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-C-20120323 3/23/2012 14 ft 20 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-A-20120406 4/6/2012 3 ft 22 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-C2-20120406 4/6/2012 14.5 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-A-20120509 5/9/2012 1 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-C-20120509 5/9/2012 20 ft 22 ft N
Magnesium	1050000	1060000	809000	831000	812000	828000	934000	970000
Manganese	35.9	19.5	57.7	39.3	69.4	38.3	64.9	50
Mercury	0.00024	0.00025	0.00076	0.00082	0.00163	0.00015	0.00144	0.00096
Nickel	0.8	0.8	0.8	0.8	0.8	0.8	1.5	0.9
Potassium	458000	471000	280000	290000	272000	279000	261000	274000
Selenium	0.582	0.581	1.16	1.16	1.16	1.16	1.21	1.21
Silver	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	6900000	6980000	7060000	7180000	7120000	7280000	6610000	6870000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
Vanadium	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Zinc	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.000098	0.000099	0.00002	0.00002	0.000022	0.00002	0.000091	0.00002
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	10	10	10	10	10	1.9	29.73	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.03	8.794	1.2	8.44	1.2	1.2	9.022	8.422
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.10324	0.08251	0.28359	0.11504	0.11722	0.0903	0.13033	0.12631
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.1867	0.17084	0.3457	0.13602	0.28032	0.10407	0.31446	0.11546
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	1	0.2
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.91 DK001_20120212 DK001SW-A-20120212 2/12/2012 3.2 ft 17 ft N	Dutch Kills 0.91 DK001_20120212 DK001SW-C-20120212 2/12/2012 16.5 ft 17 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-A-20120323 3/23/2012 1 ft 20 ft N	Dutch Kills 0.9 DK001_20120323 DK001SW-C-20120323 3/23/2012 14 ft 20 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-A-20120406 4/6/2012 3 ft 22 ft N	Dutch Kills 0.901 DK001_20120406 DK001SW-C-20120406 4/6/2012 14.5 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-A-20120509 5/9/2012 1 ft 22 ft N	Dutch Kills 0.894 DK001_20120509 DK001SW-C-20120509 5/9/2012 20 ft 22 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.018	0.018	0.09	0.09	0.3651	0.03659	0.03681	0.03918
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	49	49	49	49	49	49	50
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0028	0.0029	0.0028	0.0028	0.028	0.0028	0.0028	0.0028
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.0543	0.0633	0.2993	0.1183	0.0893	0.006	0.006	0.006

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.898 DK001SW_20120604 DK001SW-A-20120604 6/4/2012 1.5 ft 19 ft N	Dutch Kills 0.898 DK001SW_20120604 DK001SW-C-20120604 6/4/2012 15 ft 19 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-A-20120207 2/7/2012 3.2 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-C-20120207 2/7/2012 10.5 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-A-20120320 3/20/2012 1 ft 13.5 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-C-20120320 3/20/2012 8 ft 13.5 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-A-20120406 4/6/2012 1.5 ft 14.6 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-C-20120406 4/6/2012 12 ft 14.6 ft N
Water Quality Measurements								
Conductivity (µs/cm)	27575	32488	13009	14353	28080	24499	26958	26940
Dissolved Oxygen (mg/L)	12.02	3.45	7.5	6.8	18.48	17.5	7.01	4.84
pH (su)	8.16	7.29	7.39	7.45	8.69	8.31	7.64	7.5
Salinity (ppth)	19.1	23.15	12.07	13.52	20.8	22.17	22.89	23.62
Temperature (deg C)	19.94	19.17	6.07	5.83	17	8.89	11.49	10.37
Turbidity (NTU)	5.2	12.1	6.7	7.5	3	6.2	6	21.2
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	4700	3100	10	70	30	10	80	40
Coliforms, Total	24000	4000	60	190	10	10	2000	640
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	94	400	100	97	120	100	100	100
Ammonia as nitrogen	0.208	0.338	0.541	0.546	0.038	0.119	0.447	0.662
Biochemical Oxygen Demand (BOD-30)	21.5	6.81	7.02	6.39	12.6	18.3	12	8.97
Biochemical Oxygen Demand (BOD-5)	7.41	2.86	2	2	4.17	7.3	3.03	6.13
Bromide	28	36	34	36	26	32	37	36
Chloride (total)	9600	12000	12000	12000	12000	12000	14000	14000
Cyanide, total	0.002	0.002	0.004	0.002	0.002	0.002	0.003	0.002
Hardness	3000	3800	4800	5000	4100	4200	4200	4500
Nitrate + nitrite as nitrogen	0.35	0.28	0.46	0.41	0.05	0.15	0.29	0.25
Nitrogen (Kjeldahl)	1.3	0.94	0.1	0.1	0.52	0.71	0.99	1
Particulate Organic Carbon (POC)	4.4	1.08	1	1	1.68	2.75	1.63	1
Phosphorus	0.232	0.198	0.14	0.158	0.092	0.157	0.191	0.197
Sulfate	1200	1600	1400	1500	1300	1400	1600	1700
Suspended Sediment - coarse fraction	0.7397	1.494	0	0	0	4.8	3.65	0
Suspended Sediment - fine fraction	10.91	8.03	7.76	5.72	5.19	7.57	6.38	5.46
Total organic carbon	9.2	6.4	0.03	0.03	0.35	0.38	0.28	0.28
Total suspended solids	31	35	18	18	20	20	11	10
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	10	10	1	1	1	1	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.46	0.49	0.47	0.44	0.08	0.12	0.31	0.25
Nitrogen (Kjeldahl) - Dissolved	0.62	0.55	0.06	0.78	0.32	0.4	0.76	0.79
Phosphorus - Dissolved	0.134	0.17	0.115	0.117	0.021	0.015	0.069	0.149
Total dissolved solids - Dissolved	18000	23000	20000	21000	21000	22000	22000	22000
Metals (µg/L)								
Aluminum	46	60	46	48	20	53	36	65

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.898 DK001SW_20120604 DK001SW-A-20120604 6/4/2012 1.5 ft 19 ft N	Dutch Kills 0.898 DK001SW_20120604 DK001SW-C-20120604 6/4/2012 15 ft 19 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-A-20120207 2/7/2012 3.2 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-C-20120207 2/7/2012 10.5 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-A-20120320 3/20/2012 1 ft 13.5 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-C-20120320 3/20/2012 8 ft 13.5 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-A-20120406 4/6/2012 1.5 ft 14.6 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-C-20120406 4/6/2012 12 ft 14.6 ft N
Antimony	1	1	0.1	0.1	1.1	1.1	1.1	1.1
Arsenic	1.14	1.15	0.88	0.86	0.5	0.57	0.98	1.14
Barium	20.9	15.3	20.4	17.8	25.4	18.2	19.9	15.6
Beryllium	1	1	0.1	0.1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.1	0.1	0.5	0.5	0.5	0.5
Calcium	183000	231000	247000	259000	273000	276000	278000	308000
Chromium	2	2	0.2	2.5	1.5	1.5	1.5	1.5
Cobalt	1	1	0.2	0.1	1	1	1	1
Copper	3.9	1.9	0.1	0.1	1.6	1.1	2.6	2.6
Iron	243	241	277	255	260	272	345	273
Lead	2	2	0.5	0.5	1.7	1.7	1.7	1.7
Magnesium	610000	789000	1010000	1060000	825000	846000	856000	915000
Manganese	77.4	61.5	48.8	39.1	86.5	59.3	72.4	58.6
Mercury	0.00548	0.00358	0.00178	0.00152	0.00694	0.00242	0.0026	0.00412
Nickel	1.7	1	0.1	2.3	1.7	0.8	1.2	0.8
Potassium	204000	254000	267000	280000	282000	294000	206000	225000
Selenium	1.16	1.16	0.605	0.605	1.16	1.16	1.16	1.16
Silver	1	1	0.1	0.1	0.8	0.8	0.8	0.8
Sodium	5420000	6940000	6480000	6780000	7220000	7390000	7400000	7910000
Thallium	0.3	0.3	0.03	0.03	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.7	1.4	0.7	1.5	0.8
Vanadium	1.7	1	1.3	1.1	1.4	1.4	1.4	1.4
Zinc	12	12	13.6	12.6	11.9	11.9	18.3	14.7
Metals, Dissolved (µg/L)								
Aluminum	20	20	6	6	20	20	20	20
Antimony	1	1	0.1	0.1	6.9	10	1.1	1.1
Arsenic	1.09	1.09	0.79	0.94	0.09	0.09	0.66	0.95
Barium	22	17.1	20.9	16.2	26.3	15	18	15.9
Beryllium	1	1	0.1	0.1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.1	0.05	0.5	0.5	0.5	0.5
Calcium	197000	241000	244000	230000	261000	269000	254000	260000
Chromium	2	2	0.4	0.4	1.5	1.5	1.5	1.5
Cobalt	1	1	0.3	0.3	1	1	1	1
Copper	2.1	1.2	0.1	0.1	1.1	1.1	1.1	1.1
Iron	130	130	113	73	125	125	125	125
Lead	2	2	0.2	0.2	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.898 DK001SW_20120604 DK001SW-A-20120604 6/4/2012 1.5 ft 19 ft N	Dutch Kills 0.898 DK001SW_20120604 DK001SW-C-20120604 6/4/2012 15 ft 19 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-A-20120207 2/7/2012 3.2 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-C-20120207 2/7/2012 10.5 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-A-20120320 3/20/2012 1 ft 13.5 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-C-20120320 3/20/2012 8 ft 13.5 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-A-20120406 4/6/2012 1.5 ft 14.6 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-C-20120406 4/6/2012 12 ft 14.6 ft N
Magnesium	656000	812000	981000	938000	787000	836000	802000	830000
Manganese	61.2	63	54.7	34.8	79.5	51.6	72.5	55.1
Mercury	0.00047	0.00026	0.00023	0.00018	0.00452	0.00028	0.00015	0.00015
Nickel	1.6	1.1	1.5	1	1	0.8	0.8	0.8
Potassium	187000	235000	262000	247000	270000	287000	269000	277000
Selenium	1.16	1.16	0.605	0.605	1.16	1.16	1.16	1.16
Silver	1	1	0.1	0.1	0.8	0.8	0.8	0.8
Sodium	5590000	6900000	6350000	6030000	6800000	7200000	7060000	7300000
Thallium	0.3	0.3	0.03	0.03	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.7	0.7	0.7	1.3	0.7
Vanadium	1.4	2.1	0.9	1	1.4	1.4	1.4	1.4
Zinc	12	12	13.1	10.2	11.9	11.9	19	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.000114	0.000123	0.0001	0.0001	0.000019	0.00002	0.000102	0.000143
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	28.27	26.26	10	10	27.66	10	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.122	1.2	8.651	11.111	8.371	8.052	1.2	1.2
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.19465	0.1246	0.10935	0.07301	0.36137	0.20238	0.06345	0.05492
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.67843	0.12373	0.20868	0.17381	0.36899	0.35715	0.08712	0.09194
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.1	0.1	0.1	0.1	0.156	0.1	0.1	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.126	0.1	0.1	0.1
n-Docosane (C22)	0.1	0.04	0.04	0.04	0.0454	0.04	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.136	2	0.1	0.1
n-Eicosane (C20)	0.2	0.1	0.1	0.1	0.0638	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.0832	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.14	0.1	0.1	0.1
n-Heptacosane (C27)	1	0.1	0.1	0.1	0.111	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.147	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.198	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.121	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 0.898 DK001SW_20120604 DK001SW-A-20120604 6/4/2012 1.5 ft 19 ft N	Dutch Kills 0.898 DK001SW_20120604 DK001SW-C-20120604 6/4/2012 15 ft 19 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-A-20120207 2/7/2012 3.2 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120207 DK011SW-C-20120207 2/7/2012 10.5 ft 13.3 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-A-20120320 3/20/2012 1 ft 13.5 ft N	Dutch Kills 1.43 DK011_20120320 DK011SW-C-20120320 3/20/2012 8 ft 13.5 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-A-20120406 4/6/2012 1.5 ft 14.6 ft N	Dutch Kills 1.423 DK011_20120406 DK011SW-C-20120406 4/6/2012 12 ft 14.6 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.161	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.149	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.183	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.188	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.226	0.2	0.4	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.196	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.147	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	0.64	1	1	1
n-Pentadecane (C15)	0.1	0.1	0.1	0.1	0.156	0.1	0.1	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.168	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.188	0.2	0.2	0.2
n-Tetracosane (C24)	0.2	0.1	0.1	0.1	0.0822	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.178	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.134	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.08	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	0.957	1	1	1
n-Tritriacontane (C33)	0.2	0.1	0.1	0.1	0.143	0.2	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.018	0.05713	0.018	0.03697	0.18	0.18	0.18	0.03986
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	49	50	49	49	49	49	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.014	0.0028	0.0028	0.0028	0.0028	0.0028	0.028	0.0028
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.7584	0.1133	0.006	0.006	0.235294	0.4373	0.0893	0.006

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 1.427 DK011_20120511 DK011SW-A-20120511 5/11/2012 1.5 ft 13.3 ft N	Dutch Kills 1.427 DK011_20120511 DK011SW-C-20120511 5/11/2012 12 ft 13.3 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-A-20120606 6/6/2012 2 ft 16.5 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-C-20120606 6/6/2012 13.5 ft 16.5 ft N	East Branch 3.18 EB010_20120210 EB010SW-A-20120210 2/10/2012 2.4 ft 5.8 ft N	East Branch 3.17 EB010_20120321 EB010SW-A-20120321 3/21/2012 1 ft 3.2 ft N	East Branch 3.179 EB010_20120405 EB010SW-A-20120405 4/5/2012 3.5 ft 8.6 ft N	East Branch 3.174 EB010_20120508 EB010SW-A-20120508 5/8/2012 3.5 ft 7.5 ft N
Water Quality Measurements								
Conductivity (µs/cm)	22820	28609	31209	32053	12854	24095	24407	28094
Dissolved Oxygen (mg/L)	11.34	0.44	22.22	1.66	6.91	2.74	6.49	0.69
pH (su)	7.88	6.96	8.55	6.8	7.51	7.06	7.53	7
Salinity (ppth)	18.4	22.96	20.87	23.1	11.96	20.21	20.34	22.73
Temperature (deg C)	13.03	13.88	21.23	18.67	5.94	11.93	11.88	13.52
Turbidity (NTU)	3	16.4	3.4	29.7	5.2	21.2	8.4	35.2
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	2800	3200	1800	900	30	5000	320	1100
Coliforms, Total	4200	4700	4300	2200	340	9900	4400	4400
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	110	110	110	100	100	130	110	100
Ammonia as nitrogen	0.282	0.974	0.017	1.02	0.676	0.648	0.44	0.722
Biochemical Oxygen Demand (BOD-30)	13.1	24.5	16.9	18.8	5.85	21.4	11.6	12.5
Biochemical Oxygen Demand (BOD-5)	5.91	14.1	6.54	6.18	2	6.42	6.93	3.61
Bromide	21	37	38	47	34	29	31	32
Chloride (total)	11000	13000	13000	13000	12000	10000	12000	13000
Cyanide, total	0.002	0.002	0.002	0.002	0.005	0.002	0.0046	0.002
Hardness	4000	4700	3900	4000	4600	3600	4000	4500
Nitrate + nitrite as nitrogen	0.56	0.08	0.02	0.02	0.41	0.69	0.37	0.23
Nitrogen (Kjeldahl)	0.9	1.5	0.68	1.6	1	1.8	1.2	1.4
Particulate Organic Carbon (POC)	1	1.03	3.3	1.75	1	3.1	2.45	1.03
Phosphorus	0.159	0.415	0.25	0.432	0.166	0.306	0.194	0.284
Sulfate	1400	1600	1700	1700	1400	1200	1600	1600
Suspended Sediment - coarse fraction	0.73	2.95	4.2331	1.3048	0	0	5.39	1.69
Suspended Sediment - fine fraction	4.75	4.97	9.02	4.47	6.24	9.64	5.2	4.31
Total organic carbon	1.7	1.1	3.8	2.2	0.03	0.68	0.49	0.64
Total suspended solids	5.9	7.7	33	36	15	27	8	27
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	4	N/A	10	10	1	N/A	1	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.56	0.07	0.02	0.02	0.46	0.54	0.39	0.27
Nitrogen (Kjeldahl) - Dissolved	0.57	1.3	0.06	1.6	0.84	1	0.73	0.06
Phosphorus - Dissolved	0.09	0.379	0.098	0.178	0.103	0.1	0.06	0.18
Total dissolved solids - Dissolved	19000	24000	21000	23000	20000	19000	20000	24000
Metals (µg/L)								
Aluminum	20	25	20	50	21	77	20	20

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 1.427 DK011_20120511 DK011SW-A-20120511 5/11/2012 1.5 ft 13.3 ft N	Dutch Kills 1.427 DK011_20120511 DK011SW-C-20120511 5/11/2012 12 ft 13.3 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-A-20120606 6/6/2012 2 ft 16.5 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-C-20120606 6/6/2012 13.5 ft 16.5 ft N	East Branch 3.18 EB010_20120210 EB010SW-A-20120210 2/10/2012 2.4 ft 5.8 ft N	East Branch 3.17 EB010_20120321 EB010SW-A-20120321 3/21/2012 1 ft 3.2 ft N	East Branch 3.179 EB010_20120405 EB010SW-A-20120405 4/5/2012 3.5 ft 8.6 ft N	East Branch 3.174 EB010_20120508 EB010SW-A-20120508 5/8/2012 3.5 ft 7.5 ft N
Antimony	1.1	1.1	1	1	12.3	1.1	1.1	3.3
Arsenic	1.01	1.43	0.71	0.95	1.36	0.66	1.04	1.02
Barium	31.4	20	28	15.6	19.5	38.5	27.5	19.9
Beryllium	1.2	1.2	1	1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	222000	247000	262000	243000	251000	251000	273000	279000
Chromium	1.5	1.5	2	2	1.5	1.8	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	3.4	1.1	2.1	1.4	2.4	3.3	3.7	1.8
Iron	333	368	253	170	228	415	270	386
Lead	1.7	1.7	2	2	1.7	3.5	1.7	1.7
Magnesium	829000	989000	785000	818000	959000	724000	802000	924000
Manganese	140.3	82.3	94	68.1	50.9	102.9	87.8	81
Mercury	0.00293	0.00262	0.00223	0.00454	0.00167	0.00887	0.0039	0.00172
Nickel	1.6	1	1	1	1.5	1.4	2.8	0.8
Potassium	212000	296000	245000	229000	425000	247000	192000	177000
Selenium	1.21	1.21	1.16	1.16	0.581	0.929	0.929	1.21
Silver	0.8	0.8	1	1	0.8	0.8	0.8	0.8
Sodium	5830000	6930000	6680000	7120000	6310000	6290000	6920000	7530000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.6	0.6	0.7	0.7	4.4	0.6
Vanadium	1.6	1.4	1.3	2.1	1.4	1.4	1.4	2.2
Zinc	12	11.9	12	12	21.4	11.9	20.7	11.9
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	27	20	20	20
Antimony	1.1	1.1	1	1	1.1	14.4	1.1	1.1
Arsenic	0.66	1.16	0.84	0.94	1.02	0.68	0.57	0.92
Barium	32.9	23.1	26.8	16.8	19.9	30	24	18.1
Beryllium	1.2	1.2	1	1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	206000	249000	241000	264000	242000	247000	225000	241000
Chromium	1.5	1.5	2	2	1.9	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	1.1	1.1	1.8	1	1.1	1.1	1.9	1.1
Iron	125	342	130	130	125	125	142	192
Lead	1.7	1.7	2	2	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 1.427 DK011_20120511 DK011SW-A-20120511 5/11/2012 1.5 ft 13.3 ft N	Dutch Kills 1.427 DK011_20120511 DK011SW-C-20120511 5/11/2012 12 ft 13.3 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-A-20120606 6/6/2012 2 ft 16.5 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-C-20120606 6/6/2012 13.5 ft 16.5 ft N	East Branch 3.18 EB010_20120210 EB010SW-A-20120210 2/10/2012 2.4 ft 5.8 ft N	East Branch 3.17 EB010_20120321 EB010SW-A-20120321 3/21/2012 1 ft 3.2 ft N	East Branch 3.179 EB010_20120405 EB010SW-A-20120405 4/5/2012 3.5 ft 8.6 ft N	East Branch 3.174 EB010_20120508 EB010SW-A-20120508 5/8/2012 3.5 ft 7.5 ft N
Magnesium	759000	983000	766000	815000	921000	740000	691000	922000
Manganese	139	82.8	92	67.5	48.7	90.2	85.4	71.6
Mercury	0.00061	0.00094	0.00078	0.00153	0.00022	0.00117	0.00015	0.00041
Nickel	0.8	0.8	1.4	1	0.8	1	0.8	0.8
Potassium	208000	280000	224000	251000	410000	253000	232000	262000
Selenium	1.21	1.21	1.16	1.16	0.581	0.929	0.929	1.21
Silver	0.8	0.8	1	1	0.8	0.8	0.8	0.8
Sodium	5430000	6930000	6540000	6960000	6030000	6410000	6120000	6520000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.6	0.6	0.7	0.7	1.8	0.6
Vanadium	1.4	1.4	1.7	1.4	1.4	1.4	1.4	1.4
Zinc	11.9	15.1	12	12	11.9	11.9	15.3	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.00017	0.000318	0.000168	0.00031	0.000098	0.000159	0.000088	0.000102
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	33.7	28.14	27.46	28.46	10	27.05	25.76	26.39
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	9.811	8.724	1.2	20.139	8.334	8.689	1.2	9.072
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.16161	0.144	0.19985	0.22861	0.16993	0.25069	0.08584	0.11303
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.14489	0.17223	0.46784	0.34135	0.52138	0.81653	0.15651	0.38201
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.1	0.04	0.04	0.04	0.04	0.05	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	2	0.3	0.1	0.1	0.1	1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Dutch Kills 1.427 DK011_20120511 DK011SW-A-20120511 5/11/2012 1.5 ft 13.3 ft N	Dutch Kills 1.427 DK011_20120511 DK011SW-C-20120511 5/11/2012 12 ft 13.3 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-A-20120606 6/6/2012 2 ft 16.5 ft N	Dutch Kills 1.429 DK011SW_20120606 DK011SW-C-20120606 6/6/2012 13.5 ft 16.5 ft N	East Branch 3.18 EB010_20120210 EB010SW-A-20120210 2/10/2012 2.4 ft 5.8 ft N	East Branch 3.17 EB010_20120321 EB010SW-A-20120321 3/21/2012 1 ft 3.2 ft N	East Branch 3.179 EB010_20120405 EB010SW-A-20120405 4/5/2012 3.5 ft 8.6 ft N	East Branch 3.174 EB010_20120508 EB010SW-A-20120508 5/8/2012 3.5 ft 7.5 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.2	0.1	0.1	0.1	0.1	1	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.03657	0.09	0.18	0.0362	0.018	0.18585	0.18	0.04479
Herbicides (µg/L)								
Total Herbicides (U = MDL)	50	95.602	49	49	49	50	49	54
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0028	0.014	0.0028	0.0028	0.0028	0.0029	0.028	0.0032
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.2385	0.006	0.4213	0.2743	0.1153	0.5274	0.2373	0.1483

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	East Branch 3.178 EB010SW_20120606 EB010SW-A-20120606 6/6/2012 2.5 ft 5.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-A-20120212 2/12/2012 3.2 ft 23.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-C-20120212 2/12/2012 18.5 ft 23.5 ft N	English Kills 3.07 EK006_20120322 EK006SW-A-20120322 3/22/2012 1 ft 18 ft N	English Kills 3.07 EK006_20120322 EK006SW-C-20120322 3/22/2012 9 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-A-20120405 4/5/2012 1 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-C-20120405 4/5/2012 17 ft 18 ft N	English Kills 3.068 EK006_20120510 EK006SW-A-20120510 5/10/2012 2.5 ft 18 ft N
Water Quality Measurements								
Conductivity (µs/cm)	30285	13105	13665	26296	25332	25446	25491	27599
Dissolved Oxygen (mg/L)	3.6	9.85	8.63	15.51	11.98	10.96	4.42	10.1
pH (su)	6.76	7.71	7.65	8.4	8.14	8.03	7.44	7.75
Salinity (ppth)	21.03	12.71	12.94	21.92	22.41	20.52	22.12	21.46
Temperature (deg C)	19.84	4.6	5.52	12.25	9.84	13.3	10.54	14.91
Turbidity (NTU)	16.1	3.1	2.9	4	4.1	5.4	5.5	3
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	17000	20	10	20	20	10	70	14700
Coliforms, Total	36000	10	30	220	10	100	720	20000
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	110	110	100	120	110	110	100	100
Ammonia as nitrogen	0.657	0.544	0.538	0.382	0.343	0.37	0.708	0.394
Biochemical Oxygen Demand (BOD-30)	18.1	7.86	8.28	24.5	19.2	11.7	7.38	15.8
Biochemical Oxygen Demand (BOD-5)	6.69	2	2	8.18	6.48	5.32	2.47	7.14
Bromide	39	33	36	34	43	70	34	34
Chloride (total)	12000	12000	13000	12000	12000	12000	13000	12000
Cyanide, total	0.002	0.002	0.002	0.002	0.004	0.003	0.002	0.002
Hardness	3400	4600	4700	4000	4100	3900	4300	4700
Nitrate + nitrite as nitrogen	0.02	0.57	0.48	0.22	0.23	0.36	0.28	0.44
Nitrogen (Kjeldahl)	1.6	0.9	0.86	1.1	1.1	0.93	1	1.8
Particulate Organic Carbon (POC)	2.88	1	1	2.58	2.04	1.82	1	2.77
Phosphorus	0.368	0.128	0.158	0.129	0.156	0.153	0.19	0.265
Sulfate	1500	1400	1500	1400	1400	1600	1600	1500
Suspended Sediment - coarse fraction	3.7761	0	0	4.75	3.1	4.39	4.69	0.56
Suspended Sediment - fine fraction	7.93	5.72	4.97	8.17	8.95	6.04	5.44	6.75
Total organic carbon	3.3	0.03	0.03	0.45	0.4	0.38	0.26	1.7
Total suspended solids	26	15	14	20	16	7.3	8.7	16
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	10	1	1	N/A	N/A	1	1	4
Nitrate + nitrite as nitrogen - Dissolved	0.02	0.57	0.49	0.24	0.24	0.37	0.28	0.44
Nitrogen (Kjeldahl) - Dissolved	1.2	0.82	0.8	0.55	0.5	0.73	1.1	0.69
Phosphorus - Dissolved	0.344	0.087	0.115	0.023	0.041	0.063	0.076	0.167
Total dissolved solids - Dissolved	21000	20000	22000	22000	22000	20000	22000	21000
Metals (µg/L)								
Aluminum	20	20	24	33	58	25	38	32

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	East Branch 3.178 EB010SW_20120606 EB010SW-A-20120606 6/6/2012 2.5 ft 5.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-A-20120212 2/12/2012 3.2 ft 23.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-C-20120212 2/12/2012 18.5 ft 23.5 ft N	English Kills 3.07 EK006_20120322 EK006SW-A-20120322 3/22/2012 1 ft 18 ft N	English Kills 3.07 EK006_20120322 EK006SW-C-20120322 3/22/2012 9 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-A-20120405 4/5/2012 1 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-C-20120405 4/5/2012 17 ft 18 ft N	English Kills 3.068 EK006_20120510 EK006SW-A-20120510 5/10/2012 2.5 ft 18 ft N
Antimony	1	3.4	4.2	90.9	48.7	1.1	1.1	1.1
Arsenic	1.02	1.2	1.16	0.87	1.07	1.19	1.35	1.36
Barium	20	22	16.6	21.9	20.7	27.4	21.2	23
Beryllium	1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	231000	253000	253000	264000	270000	268000	291000	257000
Chromium	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	1.5	2.2	2.6	1.1	3.5	3.4	3.3	2.9
Iron	294	236	222	271	322	410	617	241
Lead	2	1.7	1.7	2.1	1.9	1.7	1.7	1.7
Magnesium	699000	957000	980000	804000	839000	783000	861000	988000
Manganese	74.5	59.4	45.6	104	70.4	111.2	84.7	79
Mercury	0.00324	0.00331	0.00283	0.00412	0.00569	0.00403	0.00388	0.00361
Nickel	1.7	1.4	1.3	1.9	2.9	3.6	3.6	2.1
Potassium	219000	427000	368000	277000	288000	191000	209000	271000
Selenium	1.16	0.581	0.581	1.16	1.16	1.16	1.16	1.21
Silver	1	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	6020000	6320000	6460000	7090000	7280000	6850000	7470000	6850000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.6
Vanadium	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Zinc	12	19.7	19.8	15.2	14.4	17.2	11.9	16.2
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	20	20	33	20
Antimony	1	1.1	1.1	59.7	44.6	1.1	1.1	1.1
Arsenic	1.04	0.87	0.91	0.35	0.53	0.79	0.88	0.99
Barium	22.8	20.8	17.5	20.2	15.8	24.1	19.5	22.8
Beryllium	1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	228000	243000	250000	295000	335000	231000	246000	234000
Chromium	2	1.8	2	1.5	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	1	1.1	1.1	1.1	1.1	2.7	1.1	2.2
Iron	228	125	125	125	125	125	125	161
Lead	2	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	East Branch 3.178 EB010SW_20120606 EB010SW-A-20120606 6/6/2012 2.5 ft 5.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-A-20120212 2/12/2012 3.2 ft 23.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-C-20120212 2/12/2012 18.5 ft 23.5 ft N	English Kills 3.07 EK006_20120322 EK006SW-A-20120322 3/22/2012 1 ft 18 ft N	English Kills 3.07 EK006_20120322 EK006SW-C-20120322 3/22/2012 9 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-A-20120405 4/5/2012 1 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-C-20120405 4/5/2012 17 ft 18 ft N	English Kills 3.068 EK006_20120510 EK006SW-A-20120510 5/10/2012 2.5 ft 18 ft N
Magnesium	751000	912000	962000	883000	1010000	713000	775000	900000
Manganese	85.9	54.6	44.7	100.3	61.5	103.5	79.3	80.1
Mercury	0.00079	0.00022	0.00017	0.00063	0.00074	0.00096	0.00015	0.00058
Nickel	1.3	0.8	0.8	2.4	1.9	0.8	0.8	1.2
Potassium	209000	404000	364000	310000	359000	239000	256000	256000
Selenium	1.16	0.722	0.581	1.16	1.16	1.16	1.16	1.21
Silver	1	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	6490000	6040000	6350000	7590000	8710000	6250000	6790000	6340000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6
Vanadium	1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Zinc	12	11.9	24.1	11.9	11.9	11.9	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.00028	0.000102	0.000103	0.00002	0.000021	0.000025	0.00002	0.000126
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	26.57	26.34	25.81	26	10	25.84	10	30.9
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	21.569	8.606	8.611	8.708	8.391	1.3	8.324	8.515
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.13239	0.34119	0.54928	0.25563	0.22285	0.10109	0.16516	0.11903
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.39681	0.66275	0.66681	0.49066	0.40038	0.19449	0.41337	0.52022
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	East Branch 3.178 EB010SW_20120606 EB010SW-A-20120606 6/6/2012 2.5 ft 5.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-A-20120212 2/12/2012 3.2 ft 23.5 ft N	English Kills 3.07 EK006_20120212 EK006SW-C-20120212 2/12/2012 18.5 ft 23.5 ft N	English Kills 3.07 EK006_20120322 EK006SW-A-20120322 3/22/2012 1 ft 18 ft N	English Kills 3.07 EK006_20120322 EK006SW-C-20120322 3/22/2012 9 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-A-20120405 4/5/2012 1 ft 18 ft N	English Kills 3.071 EK006_20120405 EK006SW-C-20120405 4/5/2012 17 ft 18 ft N	English Kills 3.068 EK006_20120510 EK006SW-A-20120510 5/10/2012 2.5 ft 18 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.03943	0.018	0.018	0.1821	0.18343	0.18	0.03667	0.03789
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	49	49	49	49	49	49	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0028	0.0028	0.0028	0.0028	0.0028	0.028	0.0028	0.0774
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.2443	0.1403	0.1133	0.3213	0.2533	0.2283	0.1553	0.2293

Table A3-2
Analytical Surface Water Results

Tributary River Mile	English Kills 3.068	English Kills 3.073	English Kills 3.5	English Kills 3.073	English Kills 3.5	English Kills 3.51	English Kills 3.51	English Kills 3.51
Location ID	EK006_20120510	EK006SW_20120608	EK014_20120208	EK006SW_20120608	EK014_20120208	EK014_20120322	EK014_20120322	EK014_20120404
Sample ID	EK006SW-C-20120510	EK006SW-A-20120608	EK014SW-A-20120208	EK006SW-C-20120608	EK014SW-C-20120208	EK014SW-A-20120322	EK014SW-C-20120322	EK014SW-A-20120404
Sample Date	5/10/2012	6/8/2012	2/8/2012	6/8/2012	2/8/2012	3/22/2012	3/22/2012	4/4/2012
Sample Depth	18 ft	1.5 ft	2 ft	18 ft	6 ft	1 ft	5 ft	1.5 ft
Water Column Depth	18 ft	19 ft	8.7 ft	19 ft	8.7 ft	8 ft	8 ft	11 ft
Sample Type	N	N	N	N	N	N	N	FD
Water Quality Measurements								
Conductivity (µs/cm)	28453	30500	12207	31208	12483	25283	25131	23795
Dissolved Oxygen (mg/L)	4.03	14.26	9.23	1.76	8.13	12.27	11.02	8.37
pH (su)	7.18	8.02	7.54	6.96	7.51	8.17	8.09	7.76
Salinity (ppth)	22.79	21.28	11.65	22.27	11.42	22.07	22.25	19.59
Temperature (deg C)	13.96	19.83	4.95	18.98	5.61	10.32	9.77	12.21
Turbidity (NTU)	1.8	2.9	3.7	2.9	4.4	4.1	4.1	5.3
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	480	3300	100	300	120	10	20	55
Coliforms, Total	5700	15000	170	2300	200	160	50	2150
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	100	100	110	100	110	110	110	110
Ammonia as nitrogen	0.623	0.017	0.527	0.38	0.558	0.335	0.377	0.4035
Biochemical Oxygen Demand (BOD-30)	6.1	11	6.27	4.23	4.98	22.2	18.8	9.975
Biochemical Oxygen Demand (BOD-5)	2	7.16	2	2	2	8.16	7.2	4.38
Bromide	33	38	29	45	33	36	55	33.5
Chloride (total)	12000	12000	10000	13000	10000	12000	13000	11500
Cyanide, total	0.002	0.003	0.005	0.002	0.002	0.002	0.002	0.003
Hardness	4600	3900	4400	3800	4500	4000	4000	3650
Nitrate + nitrite as nitrogen	0.37	0.22	0.6	0.24	0.54	0.22	0.23	0.35
Nitrogen (Kjeldahl)	1.3	1.6	0.1	1	0.1	1.2	1.3	0.995
Particulate Organic Carbon (POC)	1	8.03	1	1	1	2.85	2.97	1.26
Phosphorus	0.251	0.442	0.147	0.207	0.151	0.148	0.189	0.1775
Sulfate	1600	1400	1200	1800	1200	1400	1400	1350
Suspended Sediment - coarse fraction	2.15	3.6309	0	4.3628	0	0	0	1.935
Suspended Sediment - fine fraction	4.66	8.6	7.74	4.91	9.65	9.63	12.26	5.81
Total organic carbon	1.2	3.6	0.03	2.2	0.03	0.45	0.43	0.485
Total suspended solids	7.8	56	14	29	10	22	24	8.3
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	4	10	1	10	1	N/A	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.36	0.24	0.6	0.26	0.56	0.22	0.26	0.375
Nitrogen (Kjeldahl) - Dissolved	0.83	0.06	0.79	0.62	0.79	0.46	0.52	0.675
Phosphorus - Dissolved	0.104	0.14	0.089	0.156	0.163	0.025	0.033	0.074
Total dissolved solids - Dissolved	23000	22000	19000	23000	19000	22000	22000	19000
Metals (µg/L)								
Aluminum	20	20	28	26	104	31	50	23.5

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	English Kills 3.068 EK006_20120510 EK006SW-C-20120510 5/10/2012 18 ft 18 ft N	English Kills 3.073 EK006SW_20120608 EK006SW-A-20120608 6/8/2012 1.5 ft 19 ft N	English Kills 3.5 EK014_20120208 EK014SW-A-20120208 2/8/2012 2 ft 8.7 ft N	English Kills 3.073 EK006SW_20120608 EK006SW-C-20120608 6/8/2012 18 ft 19 ft N	English Kills 3.5 EK014_20120208 EK014SW-C-20120208 2/8/2012 6 ft 8.7 ft N	English Kills 3.51 EK014_20120322 EK014SW-A-20120322 3/22/2012 1 ft 8 ft N	English Kills 3.51 EK014_20120322 EK014SW-C-20120322 3/22/2012 5 ft 8 ft N	English Kills 3.51 EK014_20120404 EK014SW-A-20120404 4/4/2012 1.5 ft 11 ft FD
Antimony	1.1	1	0.1	1	0.1	41.5	1.1	1.1
Arsenic	1.5	1.02	1.12	1.14	1.12	0.83	0.94	1.03
Barium	19.1	23	26.5	17.4	24.6	21.5	25.5	27.3
Beryllium	1.2	1	0.1	1	0.1	1.2	1.2	1.2
Cadmium	0.5	0.5	0.1	0.5	0.2	0.5	0.5	0.5
Calcium	243000	258000	231000	238000	237000	268000	266000	260000
Chromium	1.5	2	0.2	2	0.2	1.5	1.5	1.5
Cobalt	1	1	0.3	1	0.3	1	1	1
Copper	2.8	2.1	3	2.8	4.1	1.1	2.1	4.45
Iron	439	293	277	396	347	320	470	367
Lead	1.7	2	1.5	2	1.9	1.7	1.9	1.7
Magnesium	978000	802000	927000	792000	957000	816000	815000	730500
Manganese	80	78.6	66.9	77.6	67.7	100.3	87.1	136.2
Mercury	0.00225	0.00169	0.00422	0.00209	0.006	0.00444	0.0055	0.005405
Nickel	2.2	1.3	2.6	1.2	2.8	1.2	2.3	2.95
Potassium	301000	235000	242000	214000	247000	284000	283000	238500
Selenium	1.21	1.16	0.614	1.16	0.626	1.16	1.16	1.2245
Silver	0.8	1	0.1	1	0.1	0.8	0.8	0.8
Sodium	6900000	6900000	5960000	6840000	6130000	7190000	7200000	6270000
Thallium	0.3	0.3	0.03	0.3	0.03	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.6	0.7	0.7	0.7	1.15
Vanadium	1.4	1.9	1.2	1.9	1.3	1.4	1.4	1.4
Zinc	11.9	12	22.4	12	24.3	15.4	15.8	35.15
Metals, Dissolved (µg/L)								
Aluminum	20	20	5	20	15	20	20	20
Antimony	1.1	1	0.1	1.8	0.1	34.2	16.2	1.1
Arsenic	0.95	1.02	0.92	1.07	0.85	0.34	0.41	0.43
Barium	17.1	22.7	25.3	17.6	23.4	17.1	16.7	27
Beryllium	1.2	1	0.1	1	0.1	1.2	1.2	1.2
Cadmium	0.5	0.5	0.05	0.5	0.05	0.5	0.5	0.5
Calcium	236000	259000	238000	260000	236000	314000	267000	228000
Chromium	1.5	2	0.4	2	0.3	1.5	1.5	1.5
Cobalt	1	1	0.4	1	0.3	1	1	1
Copper	1.1	1	1.4	1	0.1	1.1	1.1	2.45
Iron	208	130	74	130	80	125	208	1012.5
Lead	1.7	2	0.2	2	0.2	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile	English Kills 3.068	English Kills 3.073	English Kills 3.5	English Kills 3.073	English Kills 3.5	English Kills 3.51	English Kills 3.51	English Kills 3.51
Location ID	EK006_20120510	EK006SW_20120608	EK014_20120208	EK006SW_20120608	EK014_20120208	EK014_20120322	EK014_20120322	EK014_20120404
Sample ID	EK006SW-C-20120510	EK006SW-A-20120608	EK014SW-A-20120208	EK006SW-C-20120608	EK014SW-C-20120208	EK014SW-A-20120322	EK014SW-C-20120322	EK014SW-A-20120404
Sample Date	5/10/2012	6/8/2012	2/8/2012	6/8/2012	2/8/2012	3/22/2012	3/22/2012	4/4/2012
Sample Depth	18 ft	1.5 ft	2 ft	18 ft	6 ft	1 ft	5 ft	1.5 ft
Water Column Depth	18 ft	19 ft	8.7 ft	19 ft	8.7 ft	8 ft	8 ft	11 ft
Sample Type	N	N	N	N	N	N	N	FD
Magnesium	953000	771000	936000	823000	942000	934000	833000	736000
Manganese	75.4	73.1	65.5	73.8	65.8	92.2	82.3	128.4
Mercury	0.00015	0.00033	0.00016	0.00112	0.00015	0.0006	0.00065	0.00162
Nickel	3	2.3	2.4	1.7	2.4	1.9	1.2	3.5
Potassium	286000	244000	249000	245000	251000	332000	288000	229500
Selenium	1.21	1.16	0.63	1.16	0.484	1.16	1.16	0.94
Silver	0.8	1	0.1	1	0.1	0.8	0.8	0.8
Sodium	6800000	6530000	6010000	7000000	6060000	8050000	7210000	6165000
Thallium	0.3	0.3	0.03	0.3	0.03	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7
Vanadium	1.4	1.4	0.9	1.3	0.9	1.4	1.4	1.4
Zinc	11.9	12	16.8	12	15.8	11.9	11.9	24.85
Organometallic Compounds (µg/L)								
Methyl mercury	0.000019	0.000092	0.0001	0.000043	0.0001	0.000019	0.00002	0.000034
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	26.06	29.56	26.42	26.66	26.4	26.16	26.05	26.025
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.985	8.102	7.971	1.2	7.946	9.142	8.391	1.2
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.15647	0.16419	0.32036	0.17815	0.38739	0.24786	0.25762	0.1275
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.28406	0.53114	0.73134	0.29309	0.76538	0.37822	0.39046	0.662175
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.25
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	English Kills 3.068 EK006_20120510 EK006SW-C-20120510 5/10/2012 18 ft 18 ft N	English Kills 3.073 EK006SW_20120608 EK006SW-A-20120608 6/8/2012 1.5 ft 19 ft N	English Kills 3.5 EK014_20120208 EK014SW-A-20120208 2/8/2012 2 ft 8.7 ft N	English Kills 3.073 EK006SW_20120608 EK006SW-C-20120608 6/8/2012 18 ft 19 ft N	English Kills 3.5 EK014_20120208 EK014SW-C-20120208 2/8/2012 6 ft 8.7 ft N	English Kills 3.51 EK014_20120322 EK014SW-A-20120322 3/22/2012 1 ft 8 ft N	English Kills 3.51 EK014_20120322 EK014SW-C-20120322 3/22/2012 5 ft 8 ft N	English Kills 3.51 EK014_20120404 EK014SW-A-20120404 4/4/2012 1.5 ft 11 ft FD
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.03745	0.18	0.03787	0.03584	0.03659	0.18078	0.18937	0.18
Herbicides (µg/L)								
Total Herbicides (U = MDL)	50	49	49	50	49	49	49	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.2084	0.0028	0.0028	0.0028	0.0028	0.0325	0.0029	0.026
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.0933	0.5593	0.1573	0.1513	0.1603	0.2963	0.2753	0.3479

Table A3-2
Analytical Surface Water Results

Tributary	English Kills	English Kills	English Kills	English Kills	English Kills	English Kills	English Kills	English Kills
River Mile	3.51	3.505	3.505	3.505	3.505	3.8	3.8	3.8
Location ID	EK014_20120404	EK014_20120508	EK014_20120508	EK014SW_20120605	EK014SW_20120605	EK022_20120208	EK022_20120208	EK022_20120322
Sample ID	EK014SW-C-20120404	EK014SW-A-20120508	EK014SW-C-20120508	EK014SW-A-20120605	EK014SW-C-20120605	EK022SW-A-20120208	EK022SW-C-20120208	EK022SW-A-20120322
Sample Date	4/4/2012	5/8/2012	5/8/2012	6/5/2012	6/5/2012	2/8/2012	2/8/2012	3/22/2012
Sample Depth	7.5 ft	2.5 ft	6.5 ft	1.5 ft	6 ft	0.5 ft	4.5 ft	3 ft
Water Column Depth	11 ft	10 ft	10 ft	10 ft	10 ft	6.9 ft	6.9 ft	6.8 ft
Sample Type	N	N	N	N	N	N	N	N
Water Quality Measurements								
Conductivity (µs/cm)	24929	27733	28022	29176	29392	10580	12264	24797
Dissolved Oxygen (mg/L)	3.69	4.59	3.89	7.96	7.55	8.51	7.99	9.46
pH (su)	7.37	7.18	7.16	7.44	7.42	7.55	7.48	7.84
Salinity (ppth)	21.56	22.4	22.68	20.63	20.88	9.98	11.53	21.9
Temperature (deg C)	10.67	13.54	13.53	18.95	18.89	4.94	5.45	9.78
Turbidity (NTU)	6.3	3.9	2.5	6.3	4.9	10.6	5.2	5.2
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	90	2200	220	900	2100	280	640	20
Coliforms, Total	2000	5200	960	5700	5400	980	8400	300
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	110	110	100	100	100	130	110	120
Ammonia as nitrogen	0.739	0.769	0.734	0.017	0.411	0.017	0.676	0.422
Biochemical Oxygen Demand (BOD-30)	10.7	8.04	10.7	14.9	11.4	7.65	9.06	18.8
Biochemical Oxygen Demand (BOD-5)	2	3.19	5.17	4.94	2.89	2	2	7.03
Bromide	36	37	34	37	34	42	26	37
Chloride (total)	13000	12000	12000	12000	12000	9800	11000	12000
Cyanide, total	0.002	0.002	0.002	0.018	0.002	0.002	0.0046	0.002
Hardness	3800	4300	4500	3700	3700	4000	4500	4000
Nitrate + nitrite as nitrogen	0.26	0.35	0.35	0.27	0.27	0.45	0.49	0.22
Nitrogen (Kjeldahl)	1.2	1.5	1.4	1.1	0.91	2.1	1.2	1.4
Particulate Organic Carbon (POC)	1	1.19	1	3.48	2.32	1	3.82	2.84
Phosphorus	0.219	0.247	0.253	0.372	0.288	0.226	0.208	0.193
Sulfate	1600	1500	1500	1600	1500	1200	1400	1400
Suspended Sediment - coarse fraction	2.09	1.99	0.75	3.2799	2.4455	0	0	9.98
Suspended Sediment - fine fraction	6.26	4.57	12.7	10.57	6.02	6.42	14.6	9.79
Total organic carbon	0.31	0.56	0.55	3.2	2.3	0.03	0.03	0.46
Total suspended solids	7.5	8.5	11	28	28	13	20	18
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	N/A	N/A	N/A	10	10	1	1	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.27	0.34	0.37	0.31	0.34	0.46	0.51	0.21
Nitrogen (Kjeldahl) - Dissolved	0.87	0.06	0.06	0.06	0.06	1	0.9	0.64
Phosphorus - Dissolved	0.113	0.185	0.134	0.131	0.163	0.106	0.109	0.046
Total dissolved solids - Dissolved	21000	23000	24000	21000	21000	17000	20000	22000
Metals (µg/L)								
Aluminum	20	20	48	20	21	27	52	44

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	English Kills 3.51 EK014_20120404 EK014SW-C-20120404 4/4/2012 7.5 ft 11 ft N	English Kills 3.505 EK014_20120508 EK014SW-A-20120508 5/8/2012 2.5 ft 10 ft N	English Kills 3.505 EK014_20120508 EK014SW-C-20120508 5/8/2012 6.5 ft 10 ft N	English Kills 3.505 EK014SW_20120605 EK014SW-A-20120605 6/5/2012 1.5 ft 10 ft N	English Kills 3.505 EK014SW_20120605 EK014SW-C-20120605 6/5/2012 6 ft 10 ft N	English Kills 3.8 EK022_20120208 EK022SW-A-20120208 2/8/2012 0.5 ft 6.9 ft N	English Kills 3.8 EK022_20120208 EK022SW-C-20120208 2/8/2012 4.5 ft 6.9 ft N	English Kills 3.8 EK022_20120322 EK022SW-A-20120322 3/22/2012 3 ft 6.8 ft N
Antimony	1.1	6.6	3.3	1	1	0.1	0.1	31.7
Arsenic	0.09	1.08	1.05	1.28	1.25	0.82	1.01	0.84
Barium	28.6	22.7	18.9	21.6	22.4	36.1	25.5	24.5
Beryllium	1.2	1.2	1.2	1	1	0.1	0.1	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.5
Calcium	272000	271000	273000	246000	234000	225000	233000	268000
Chromium	1.5	1.5	1.5	2	2	0.2	0.2	1.5
Cobalt	1	1	1	1	1	0.2	0.2	1
Copper	3.1	2.4	2.3	2	2	2.8	3	2.5
Iron	584	429	461	502	496	403	353	383
Lead	1.7	1.7	1.7	2	2	1.5	2.5	2
Magnesium	772000	892000	920000	748000	760000	844000	949000	820000
Manganese	104	106.1	90.2	84.2	81.2	248.9	74.6	109.1
Mercury	0.00356	0.00145	0.00175	0.00363	0.00305	0.00451	0.0115	0.00745
Nickel	2.5	1.5	0.8	1.4	1.6	2.7	2.7	2.2
Potassium	255000	172000	177000	224000	211000	220000	235000	284000
Selenium	0.929	1.21	1.21	1.16	1.16	0.484	0.682	1.16
Silver	0.8	0.8	0.8	1	1	0.1	0.1	0.8
Sodium	6640000	7270000	7510000	6440000	6600000	5440000	6080000	7210000
Thallium	0.3	0.3	0.3	0.3	0.3	0.03	0.03	0.3
Tin	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Vanadium	1.4	2.7	1.4	1.9	2.7	1	1.3	1.4
Zinc	15.1	11.9	11.9	12	12	27.9	23	15.7
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	20	5	5	20
Antimony	1.1	1.1	1.1	1	1	0.1	0.1	26.3
Arsenic	0.95	1	1.64	1.03	1.05	0.63	0.88	0.36
Barium	22.5	19.1	18.6	22.1	22.3	33.7	25.7	18.7
Beryllium	1.2	1.2	1.2	1	1	0.1	0.1	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.05	0.05	0.5
Calcium	260000	247000	236000	258000	251000	230000	239000	297000
Chromium	1.5	1.5	1.5	2	2	0.3	0.4	1.5
Cobalt	1	1	1	1	1	0.4	0.4	1
Copper	1.1	1.1	1.1	1	1	0.1	0.1	1.1
Iron	125	161	146	130	249	79	83	125
Lead	1.7	1.7	1.7	2	2	0.2	0.2	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	English Kills 3.51 EK014_20120404 EK014SW-C-20120404 4/4/2012 7.5 ft 11 ft N	English Kills 3.505 EK014_20120508 EK014SW-A-20120508 5/8/2012 2.5 ft 10 ft N	English Kills 3.505 EK014_20120508 EK014SW-C-20120508 5/8/2012 6.5 ft 10 ft N	English Kills 3.505 EK014SW_20120605 EK014SW-A-20120605 6/5/2012 1.5 ft 10 ft N	English Kills 3.505 EK014SW_20120605 EK014SW-C-20120605 6/5/2012 6 ft 10 ft N	English Kills 3.8 EK022_20120208 EK022SW-A-20120208 2/8/2012 0.5 ft 6.9 ft N	English Kills 3.8 EK022_20120208 EK022SW-C-20120208 2/8/2012 4.5 ft 6.9 ft N	English Kills 3.8 EK022_20120322 EK022SW-A-20120322 3/22/2012 3 ft 6.8 ft N
Magnesium	841000	940000	892000	786000	774000	875000	936000	894000
Manganese	104.9	104.4	82.4	89	80.5	211.5	76.7	100
Mercury	0.00015	0.0005	0.00047	0.00047	0.00039	0.00024	0.00021	0.00048
Nickel	3.3	0.8	0.8	1.8	1.2	2.3	2.4	1.7
Potassium	264000	263000	245000	240000	240000	230000	250000	312000
Selenium	0.929	1.21	1.21	1.16	1.16	0.605	0.678	1.16
Silver	0.8	0.8	0.8	1	1	0.1	0.1	0.8
Sodium	7060000	6640000	6360000	6670000	6530000	5610000	6030000	7660000
Thallium	0.3	0.3	0.3	0.3	0.3	0.03	0.03	0.3
Tin	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Vanadium	1.4	1.4	1.4	2.4	2.1	0.7	0.9	1.4
Zinc	11.9	11.9	11.9	12	12	9.7	11.7	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.000021	0.000075	0.000019	0.000146	0.00008	0.0001	0.000101	0.000035
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	26.17	15.9	25.93	26.16	26.86	26.66	27.81	26.14
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	1.2	8.948	9.65	8.072	1.2	8.001	33.907	8.421
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.10889	0.14563	0.17765	0.15794	0.15144	0.28161	0.28572	0.23504
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.39385	0.55115	0.46815	0.50951	0.45765	0.86562	0.80163	0.37901
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	English Kills 3.51 EK014_20120404 EK014SW-C-20120404 4/4/2012 7.5 ft 11 ft N	English Kills 3.505 EK014_20120508 EK014SW-A-20120508 5/8/2012 2.5 ft 10 ft N	English Kills 3.505 EK014_20120508 EK014SW-C-20120508 5/8/2012 6.5 ft 10 ft N	English Kills 3.505 EK014SW_20120605 EK014SW-A-20120605 6/5/2012 1.5 ft 10 ft N	English Kills 3.505 EK014SW_20120605 EK014SW-C-20120605 6/5/2012 6 ft 10 ft N	English Kills 3.8 EK022_20120208 EK022SW-A-20120208 2/8/2012 0.5 ft 6.9 ft N	English Kills 3.8 EK022_20120208 EK022SW-C-20120208 2/8/2012 4.5 ft 6.9 ft N	English Kills 3.8 EK022_20120322 EK022SW-A-20120322 3/22/2012 3 ft 6.8 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.089	0.04135	0.04038	0.18	0.18	0.03633	0.03833	0.18322
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	53	53	49	49	49	49	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.014	0.0033	0.0352	0.0028	0.0028	0.0028	0.0028	0.0345
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.2193	0.1633	0.1693	0.3093	0.2463	0.1943	0.2093	0.2663

Table A3-2
Analytical Surface Water Results

Tributary River Mile	English Kills 3.795	English Kills 3.797	English Kills 3.794	Maspeth Creek 2.6	Maspeth Creek 2.6	Maspeth Creek 2.609	Maspeth Creek 2.606	Maspeth Creek 2.607
Location ID	EK022_20120404	EK022_20120510	EK022SW_20120605	MC008_20120209	MC008_20120320	MC008_20120406	MC008_20120511	MC008SW_20120607
Sample ID	EK022SW-A-20120404	EK022SW-A-20120510	EK022SW-A-20120605	MC008SW-A-20120209	MC008SW-A-20120320	MC008SW-A-20120406	MC008SW-A-20120511	MC008SW-A-20120607
Sample Date	4/4/2012	5/10/2012	6/5/2012	2/9/2012	3/20/2012	4/6/2012	5/11/2012	6/7/2012
Sample Depth	3 ft	3 ft	2.5 ft	2.5 ft	2 ft	3 ft	1.5 ft	3 ft
Water Column Depth	6.3 ft	6.7 ft	5 ft	5.2 ft	4.7 ft	5.9 ft	2.9 ft	6 ft
Sample Type	N	N	N	N	N	N	N	N
Water Quality Measurements								
Conductivity (µs/cm)	24113	27153	27922	12290	25534	24813	25130	30476
Dissolved Oxygen (mg/L)	7.2	3.71	2.05	8.55	15.28	8.49	5.46	8.17
pH (su)	7.65	7.18	7.04	7.54	8.43	7.71	7.42	7.51
Salinity (ppth)	20.29	21.21	19.85	11.87	22.22	21.16	18.54	21.4
Temperature (deg C)	11.46	14.76	18.83	4.58	10.46	11.08	16.72	19.58
Turbidity (NTU)	11.4	12.4	47.5	5.8	4.7	6.5	19.6	16.4
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	600	7300	1800	160	70	110	5700	3600
Coliforms, Total	4800	20000	4100	350	10	2200	4800	5700
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	110	110	110	110	110	110	120	100
Ammonia as nitrogen	0.482	0.811	0.464	0.572	0.063	0.307	0.325	0.017
Biochemical Oxygen Demand (BOD-30)	18	14.2	15.8	6.46	12.1	15.5	11.8	11.4
Biochemical Oxygen Demand (BOD-5)	2	4.42	4.6	2	8.47	2.2	4.23	2.87
Bromide	30	25	28	30	31	34	32	36
Chloride (total)	12000	12000	11000	10000	12000	13000	11000	13000
Cyanide, total	0.003	0.002	0.002	0.0046	0.002	0.002	0.002	0.002
Hardness	3600	4400	3200	4500	4800	4000	4000	3700
Nitrate + nitrite as nitrogen	0.3	0.32	0.2	0.64	0.12	0.4	0.98	0.24
Nitrogen (Kjeldahl)	2	1.5	1.3	0.91	0.76	1.1	0.83	0.62
Particulate Organic Carbon (POC)	2.78	1	2.19	1	2.95	2.58	1.15	1.5
Phosphorus	0.293	0.284	0.341	0.11	0.201	0.177	0.175	0.218
Sulfate	1500	1400	1500	1300	1500	1600	1300	1600
Suspended Sediment - coarse fraction	1.66	2.85	2.6552	0	0	7.26	0.75	1.3338
Suspended Sediment - fine fraction	8.51	5.33	9.29	5.91	7.73	5.22	5.25	3.43
Total organic carbon	0.6	1.7	2.6	0.03	0.47	0.45	1.6	2.5
Total suspended solids	23	8	29	16	29	15	7.4	30
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	N/A	4	10	1	1	N/A	4	10
Nitrate + nitrite as nitrogen - Dissolved	0.31	0.31	0.86	0.64	0.11	0.4	1.2	1.1
Nitrogen (Kjeldahl) - Dissolved	0.68	1.1	1.1	0.85	0.31	0.63	0.6	0.06
Phosphorus - Dissolved	0.095	0.183	0.174	0.094	0.02	0.053	0.095	0.098
Total dissolved solids - Dissolved	20000	21000	20000	19000	22000	21000	20000	22000
Metals (µg/L)								
Aluminum	20	20	23	27	51	22	39	20

Table A3-2
Analytical Surface Water Results

Tributary River Mile	English Kills 3.795	English Kills 3.797	English Kills 3.794	Maspeth Creek 2.6	Maspeth Creek 2.6	Maspeth Creek 2.609	Maspeth Creek 2.606	Maspeth Creek 2.607
Location ID	EK022_20120404	EK022_20120510	EK022SW_20120605	MC008_20120209	MC008_20120320	MC008_20120406	MC008_20120511	MC008SW_20120607
Sample ID	EK022SW-A-20120404	EK022SW-A-20120510	EK022SW-A-20120605	MC008SW-A-20120209	MC008SW-A-20120320	MC008SW-A-20120406	MC008SW-A-20120511	MC008SW-A-20120607
Sample Date	4/4/2012	5/10/2012	6/5/2012	2/9/2012	3/20/2012	4/6/2012	5/11/2012	6/7/2012
Sample Depth	3 ft	3 ft	2.5 ft	2.5 ft	2 ft	3 ft	1.5 ft	3 ft
Water Column Depth	6.3 ft	6.7 ft	5 ft	5.2 ft	4.7 ft	5.9 ft	2.9 ft	6 ft
Sample Type	N	N	N	N	N	N	N	N
Antimony	1.1	1.1	1	73	1.1	1.1	1.1	1
Arsenic	1.1	1.54	1.19	1.92	0.76	1.31	1.78	1.11
Barium	26.6	24.2	33.1	29	21.1	26.3	39.6	20.7
Beryllium	1.2	1.2	1	1.2	1.2	1.2	1.2	1
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	256000	239000	202000	243000	320000	274000	224000	242000
Chromium	1.5	1.5	2	1.5	1.5	1.5	1.5	2
Cobalt	1	1	1	1	1	1	1	1
Copper	4.6	2.1	2.2	3.2	3.3	5	3.2	2.5
Iron	412	348	489	252	227	313	294	254
Lead	1.7	1.7	2	1.7	1.7	1.7	1.7	2
Magnesium	719000	929000	646000	957000	976000	805000	839000	743000
Manganese	128.7	114.9	131	60.7	63	85.5	75.6	76.2
Mercury	0.00581	0.00547	0.00489	0.00229	0.00371	0.00295	0.00385	0.00342
Nickel	3	1.6	1.5	3.4	1.6	3.1	1.9	1.2
Potassium	237000	242000	174000	252000	330000	195000	221000	222000
Selenium	0.929	1.21	1.16	0.581	1.16	1.16	1.21	1.16
Silver	0.8	0.8	1	0.8	0.8	0.8	0.8	1
Sodium	6210000	6520000	5660000	6190000	8390000	6960000	5910000	6390000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.6	0.6	0.7	1	0.9	0.6	0.6
Vanadium	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.7
Zinc	15.7	11.9	12	28.3	11.9	26.8	11.9	12
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	20	20	20	20
Antimony	1.1	1.1	1	1.1	10.2	1.1	1.1	1
Arsenic	0.76	1.13	1.04	1.44	0.71	0.87	1.29	1.14
Barium	25.3	23.5	23.5	25.3	19.6	22.6	40.8	21.1
Beryllium	1.2	1.2	1	1.2	1.2	1.2	1.2	1
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	243000	232000	219000	237000	266000	246000	213000	248000
Chromium	1.5	1.5	2	1.7	1.5	1.5	1.5	2
Cobalt	1	1	1	1	1	1	1	1
Copper	1.1	1.1	1	1.1	1.1	1.6	1.1	1
Iron	125	164	130	125	125	125	125	130
Lead	1.7	1.7	2	1.7	1.7	1.7	1.7	2

Table A3-2
Analytical Surface Water Results

Tributary River Mile	English Kills 3.795	English Kills 3.797	English Kills 3.794	Maspeth Creek 2.6	Maspeth Creek 2.6	Maspeth Creek 2.609	Maspeth Creek 2.606	Maspeth Creek 2.607
Location ID	EK022_20120404	EK022_20120510	EK022SW_20120605	MC008_20120209	MC008_20120320	MC008_20120406	MC008_20120511	MC008SW_20120607
Sample ID	EK022SW-A-20120404	EK022SW-A-20120510	EK022SW-A-20120605	MC008SW-A-20120209	MC008SW-A-20120320	MC008SW-A-20120406	MC008SW-A-20120511	MC008SW-A-20120607
Sample Date	4/4/2012	5/10/2012	6/5/2012	2/9/2012	3/20/2012	4/6/2012	5/11/2012	6/7/2012
Sample Depth	3 ft	3 ft	2.5 ft	2.5 ft	2 ft	3 ft	1.5 ft	3 ft
Water Column Depth	6.3 ft	6.7 ft	5 ft	5.2 ft	4.7 ft	5.9 ft	2.9 ft	6 ft
Sample Type	N	N	N	N	N	N	N	N
Magnesium	785000	901000	696000	883000	820000	759000	817000	780000
Manganese	127.8	107.5	118.9	58.6	58.9	87.1	77.6	78.1
Mercury	0.00174	0.00065	0.00083	0.00024	0.0004	0.00015	0.00048	0.00044
Nickel	3.3	1	1.6	0.8	2	0.8	2.1	1.3
Potassium	245000	228000	197000	392000	283000	253000	293000	226000
Selenium	0.929	1.21	1.16	0.702	1.16	1.16	1.21	1.16
Silver	0.8	0.8	1	0.8	0.8	0.8	0.8	1
Sodium	6590000	6400000	5950000	5790000	7030000	6680000	5840000	6680000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.6
Vanadium	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.4
Zinc	11.9	11.9	12	11.9	11.9	14	11.9	12
Organometallic Compounds (µg/L)								
Methyl mercury	0.00013	0.000138	0.000211	0.000111	0.000066	0.000056	0.000145	0.0001
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	26.14	29.09	27.31	25.81	10	25.81	36.7	27.16
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	1.2	8.934	8.47	1.2	1.2	8.215	9.499	1.2
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.1337	0.11351	0.15743	0.22864	0.15379	0.11065	0.11525	0.15684
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.57704	0.44055	0.5231	0.58939	0.37252	0.44269	0.5426	0.38328
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.05	0.04	0.04	0.04	0.04	0.05	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	2	0.1	0.1	1	0.1	1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	English Kills 3.795 EK022_20120404 EK022SW-A-20120404 4/4/2012 3 ft 6.3 ft N	English Kills 3.797 EK022_20120510 EK022SW-A-20120510 5/10/2012 3 ft 6.7 ft N	English Kills 3.794 EK022SW_20120605 EK022SW-A-20120605 6/5/2012 2.5 ft 5 ft N	Maspeth Creek 2.6 MC008_20120209 MC008SW-A-20120209 2/9/2012 2.5 ft 5.2 ft N	Maspeth Creek 2.6 MC008_20120320 MC008SW-A-20120320 3/20/2012 2 ft 4.7 ft N	Maspeth Creek 2.609 MC008_20120406 MC008SW-A-20120406 4/6/2012 3 ft 5.9 ft N	Maspeth Creek 2.606 MC008_20120511 MC008SW-A-20120511 5/11/2012 1.5 ft 2.9 ft N	Maspeth Creek 2.607 MC008SW_20120607 MC008SW-A-20120607 6/7/2012 3 ft 6 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.3623	0.03761	0.04228	0.0383	0.18	0.3706	0.095	0.03775
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	50	50	49	49	49	53	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.028	0.1134	0.0028	0.0028	0.0029	0.028	0.015	0.0028
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.4944	0.2453	0.2493	0.1443	0.3673	0.2863	0.2374	0.1863

Table A3-2
Analytical Surface Water Results

Tributary	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile	0.21	0.21	0.21	0.21	0.216	0.216	0.212	0.212
Location ID	NC007_20120208	NC007_20120208	NC007_20120325	NC007_20120325	NC007_20120403	NC007_20120403	NC007_20120506	NC007_20120506
Sample ID	NC007SW-A-20120208	NC007SW-C-20120208	NC007SW-A-20120325	NC007SW-C-20120325	NC007SW-A-20120403	NC007SW-C-20120403	NC007SW-A-20120506	NC007SW-C-20120506
Sample Date	2/8/2012	2/8/2012	3/25/2012	3/25/2012	4/3/2012	4/3/2012	5/6/2012	5/6/2012
Sample Depth	3.2 ft	15.5 ft	2 ft	15 ft	4 ft	17 ft	2 ft	17.5 ft
Water Column Depth	18.2 ft	18.2 ft	18 ft	18 ft	21 ft	21 ft	20 ft	20 ft
Sample Type	N	N	N	N	N	N	N	FD
Water Quality Measurements								
Conductivity (µs/cm)	13088	13977	26087	26074	25607	26005	40045	41940
Dissolved Oxygen (mg/L)	9.98	4.6	13.27	9.95	8.5	8.65	6.76	6.45
pH (su)	7.71	7.88	8.35	8.04	7.76	7.81	7.48	7.46
Salinity (ppth)	12.36	13.29	22.8	23.2	22.83	23.35	34.15	36.1
Temperature (deg C)	5.5	5.44	10.36	9.72	9.63	9.45	12.98	12.88
Turbidity (NTU)	3.2	5.6	3.4	4.9	5	6.2	9.8	7.4
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	20	10	10	10	30	40	30	45
Coliforms, Total	60	20	310	110	430	310	300	265
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	100	96	100	100	99	98	95	96
Ammonia as nitrogen	0.467	0.369	0.148	0.347	0.437	0.424	0.652	0.513
Biochemical Oxygen Demand (BOD-30)	4.59	3.15	20.3	17.3	6.4	5.3	4.06	4.535
Biochemical Oxygen Demand (BOD-5)	2	2	5.44	2.63	2.6	2.5	2	2
Bromide	35	37	45	46	33	43	32	36
Chloride (total)	12000	13000	12000	13000	14000	14000	12000	12000
Cyanide, total	0.0048	0.002	0.002	0.002	0.003	0.004	0.002	0.002
Hardness	4500	5400	4300	4400	4000	4100	4000	4250
Nitrate + nitrite as nitrogen	0.53	0.45	0.29	0.35	0.37	0.36	0.5	0.465
Nitrogen (Kjeldahl)	0.1	0.1	0.78	0.73	0.83	0.73	0.98	1
Particulate Organic Carbon (POC)	1	1.56	1.69	1	1	1	1	1
Phosphorus	0.183	0.178	0.12	0.162	0.142	0.131	0.136	0.1685
Sulfate	1400	1600	1400	1400	1700	1800	1400	1450
Suspended Sediment - coarse fraction	0	0	1.6482	4.0785	2.7	1.51	2.03	1.49
Suspended Sediment - fine fraction	7.09	30.8	8.79	10.01	6.55	7.72	13.99	11.87
Total organic carbon	0.03	0.03	N/A	N/A	0.23	0.19	0.37	0.345
Total suspended solids	12	49	26	18	9.6	11	20	19
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	1	1	N/A	N/A	N/A	N/A	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.53	0.46	0.28	0.35	0.45	0.34	0.47	0.455
Nitrogen (Kjeldahl) - Dissolved	0.06	0.06	0.36	0.44	0.68	0.5	0.06	0.06
Phosphorus - Dissolved	0.104	0.134	0.042	0.106	0.098	0.116	0.117	0.142
Total dissolved solids - Dissolved	21000	22000	23000	23000	23000	23000	22000	23500
Metals (µg/L)								
Aluminum	57	578	72	146	114	174	266	227

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.21 NC007_20120208 NC007SW-A-20120208 2/8/2012 3.2 ft 18.2 ft N	Newtown Creek 0.21 NC007_20120208 NC007SW-C-20120208 2/8/2012 15.5 ft 18.2 ft N	Newtown Creek 0.21 NC007_20120325 NC007SW-A-20120325 3/25/2012 2 ft 18 ft N	Newtown Creek 0.21 NC007_20120325 NC007SW-C-20120325 3/25/2012 15 ft 18 ft N	Newtown Creek 0.216 NC007_20120403 NC007SW-A-20120403 4/3/2012 4 ft 21 ft N	Newtown Creek 0.216 NC007_20120403 NC007SW-C-20120403 4/3/2012 17 ft 21 ft N	Newtown Creek 0.212 NC007_20120506 NC007SW-A-20120506 5/6/2012 2 ft 20 ft N	Newtown Creek 0.212 NC007_20120506 NC007SW-C-20120506 5/6/2012 17.5 ft 20 ft FD
Antimony	0.1	0.1	1.1	1.1	1.1	1.1	1.1	1.1
Arsenic	0.91	1.22	0.81	0.92	0.94	0.88	0.77	0.8
Barium	21	16.6	16.7	14.1	16.8	14.7	16.3	15.65
Beryllium	0.1	0.1	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.1	0.1	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	236000	281000	279000	281000	276000	278000	269000	278000
Chromium	0.2	0.2	1.5	1.5	1.5	1.6	1.5	1.55
Cobalt	0.2	0.4	1	1	1	1	1	1
Copper	2.5	4	1.1	1.1	3.7	2.7	2.8	3.05
Iron	254	975	172	238	312	380	584	518
Lead	0.7	3.2	1.7	1.7	1.7	1.7	1.8	1.7
Magnesium	960000	1140000	867000	891000	818000	827000	816000	859500
Manganese	54.6	51.7	56.4	42.6	54.4	46	52.3	63.1
Mercury	0.00256	0.023	0.00326	0.00558	0.00701	0.00791	0.00909	0.01275
Nickel	2.2	0.1	0.8	0.8	1.5	0.8	0.9	1.05
Potassium	235000	286000	299000	306000	265000	268000	182000	190500
Selenium	0.605	0.655	1.16	1.16	1.16	1.16	1.21	1.21
Silver	0.1	0.1	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	6170000	7340000	7620000	7820000	7030000	7120000	6830000	7205000
Thallium	0.03	0.03	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.7	0.7	0.7	1.2	1.5	0.6	0.6
Vanadium	1.2	2.4	1.4	1.4	1.4	1.4	3	2.85
Zinc	16.6	14.1	11.9	11.9	11.9	11.9	11.9	11.9
Metals, Dissolved (µg/L)								
Aluminum	6	4	20	20	20	20	20	20
Antimony	0.1	0.1	6.2	3.7	1.1	1.1	1.1	5.25
Arsenic	1.07	0.94	0.6	0.61	0.93	0.86	0.75	0.995
Barium	20.1	14.3	15.6	13.5	15.2	12.8	14.1	13.6
Beryllium	0.1	0.1	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.1	0.05	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	202000	270000	352000	276000	256000	277000	258000	283000
Chromium	0.4	0.3	1.5	1.5	1.5	1.5	1.5	1.5
Cobalt	0.3	0.2	1	1	1	1	1	1
Copper	1.2	1.3	1.1	1.1	1.1	1.5	2.1	1.25
Iron	67	65	125	125	125	125	139	189.5
Lead	0.2	0.2	1.7	1.7	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.21 NC007_20120208 NC007SW-A-20120208 2/8/2012 3.2 ft 18.2 ft N	Newtown Creek 0.21 NC007_20120208 NC007SW-C-20120208 2/8/2012 15.5 ft 18.2 ft N	Newtown Creek 0.21 NC007_20120325 NC007SW-A-20120325 3/25/2012 2 ft 18 ft N	Newtown Creek 0.21 NC007_20120325 NC007SW-C-20120325 3/25/2012 15 ft 18 ft N	Newtown Creek 0.216 NC007_20120403 NC007SW-A-20120403 4/3/2012 4 ft 21 ft N	Newtown Creek 0.216 NC007_20120403 NC007SW-C-20120403 4/3/2012 17 ft 21 ft N	Newtown Creek 0.212 NC007_20120506 NC007SW-A-20120506 5/6/2012 2 ft 20 ft N	Newtown Creek 0.212 NC007_20120506 NC007SW-C-20120506 5/6/2012 17.5 ft 20 ft FD
Magnesium	816000	1110000	1080000	859000	859000	925000	829000	921000
Manganese	50.6	17.2	45.5	33.8	46.7	31.2	30.5	43.35
Mercury	0.00023	0.00031	0.00041	0.00059	0.00236	0.00216	0.00077	0.001095
Nickel	1.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
Potassium	212000	262000	381000	298000	267000	283000	166000	183500
Selenium	0.619	0.605	1.16	1.16	1.16	1.24	1.21	1.21
Silver	0.1	0.1	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	5220000	7060000	9320000	7510000	7200000	7730000	6790000	7555000
Thallium	0.03	0.03	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
Vanadium	1	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Zinc	14.7	17.4	11.9	11.9	11.9	11.9	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.0001	0.000099	0.00002	0.00002	0.00002	0.00002	0.000019	0.00002
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	10	10	10	10	10	10	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.092	8.051	8.419	1.2	8.976	1.3	1.2	8.5385
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.16556	0.16614	0.14671	0.13462	0.18814	0.09577	0.08927	0.124695
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.41688	0.21685	0.27658	0.1384	0.348	0.12905	0.077	0.128525
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.05	0.05	0.04	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.21 NC007_20120208 NC007SW-A-20120208 2/8/2012 3.2 ft 18.2 ft N	Newtown Creek 0.21 NC007_20120208 NC007SW-C-20120208 2/8/2012 15.5 ft 18.2 ft N	Newtown Creek 0.21 NC007_20120325 NC007SW-A-20120325 3/25/2012 2 ft 18 ft N	Newtown Creek 0.21 NC007_20120325 NC007SW-C-20120325 3/25/2012 15 ft 18 ft N	Newtown Creek 0.216 NC007_20120403 NC007SW-A-20120403 4/3/2012 4 ft 21 ft N	Newtown Creek 0.216 NC007_20120403 NC007SW-C-20120403 4/3/2012 17 ft 21 ft N	Newtown Creek 0.212 NC007_20120506 NC007SW-A-20120506 5/6/2012 2 ft 20 ft N	Newtown Creek 0.212 NC007_20120506 NC007SW-C-20120506 5/6/2012 17.5 ft 20 ft FD
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.03671	0.04174	0.18077	0.19038	0.3613	0.0382	0.03767	0.018
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	49	51	49	49	50	49	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	0.049526	0.067191	0.00571	0.00707	0.00524	0.00574	0.021217	0.00336
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0028	0.0028	0.0028	0.0029	0.028	0.0029	0.0028	0.0028
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	3.49947	11.765	5.57547	5.37632	5.86966	4.5978	8.20949	6.95339
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.006	0.0493	0.1933	0.1083	0.1523	0.0783	0.0183	0.0483

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.214 NC007SW_20120604 NC007SW-A-20120604 6/4/2012 3 ft 21 ft N	Newtown Creek 0.214 NC007SW_20120604 NC007SW-C-20120604 6/4/2012 20 ft 21 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-A-20120212 2/12/2012 3.2 ft 24 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-C-20120212 2/12/2012 18.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-A-20120325 3/25/2012 3 ft 23 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-C-20120325 3/25/2012 21 ft 23 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-A-20120408 4/8/2012 1.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-C-20120408 4/8/2012 21 ft 24 ft N
Water Quality Measurements								
Conductivity (µs/cm)	30130	30766	14314	14371	26083	26186	27247	27337
Dissolved Oxygen (mg/L)	6.19	6	11.52	11.53	14.25	9.99	9.18	9.25
pH (su)	7.35	7.42	7.95	7.95	8.41	8.06	7.92	7.97
Salinity (ppth)	21.29	21.99	13.89	13.92	22.67	23.27	23.99	24.27
Temperature (deg C)	19.22	19.06	4.84	4.91	10.59	9.78	10.26	9.96
Turbidity (NTU)	4.3	5.2	7.2	8	3.7	4.5	7.4	7.3
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	490	400	10	10	20	10	10	10
Coliforms, Total	760	640	100	20	180	90	20	30
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	91	93	95	96	100	100	96	96
Ammonia as nitrogen	0.34	0.34	0.436	0.43	0.102	0.336	0.352	0.352
Biochemical Oxygen Demand (BOD-30)	3.77	3.84	9.78	11.3	25	18.9	4.62	4.52
Biochemical Oxygen Demand (BOD-5)	2	2	2	2	6.76	3.1	2	2
Bromide	34	31	43	42	42	45	33	44
Chloride (total)	11000	12000	13000	13000	13000	12000	14000	14000
Cyanide, total	0.002	0.002	0.003	0.002	0.002	0.002	0.004	0.003
Hardness	3900	4200	5000	5200	4200	4300	4700	4600
Nitrate + nitrite as nitrogen	0.34	0.31	0.46	0.46	0.54	0.32	0.28	0.26
Nitrogen (Kjeldahl)	0.87	0.94	0.76	0.1	0.91	0.76	0.66	0.66
Particulate Organic Carbon (POC)	1	1	1	1	2.39	1.12	1	1
Phosphorus	0.131	0.159	0.129	0.137	0.159	0.137	0.112	0.123
Sulfate	1600	1600	1700	1600	1500	1300	1700	1900
Suspended Sediment - coarse fraction	0.5821	2.0343	0.374	0	4.8584	0.3816	1.82	1.5
Suspended Sediment - fine fraction	15.91	14.61	12	13.3	10.84	10.5	11.3	13
Total organic carbon	5.9	5.9	0.03	0.03	N/A	N/A	0.03	0.03
Total suspended solids	39	38	22	20	25	12	15	15
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	10	10	1	1	N/A	N/A	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.64	0.42	0.53	0.46	0.3	0.33	0.31	0.27
Nitrogen (Kjeldahl) - Dissolved	0.06	0.52	0.72	0.97	0.29	0.46	0.06	0.06
Phosphorus - Dissolved	0.105	0.124	0.119	0.134	0.041	0.088	0.08	0.086
Total dissolved solids - Dissolved	22000	23000	22000	23000	23000	23000	23000	23000
Metals (µg/L)								
Aluminum	209	228	82	113	73	146	190	147

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.214 NC007SW_20120604 NC007SW-A-20120604 6/4/2012 3 ft 21 ft N	Newtown Creek 0.214 NC007SW_20120604 NC007SW-C-20120604 6/4/2012 20 ft 21 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-A-20120212 2/12/2012 3.2 ft 24 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-C-20120212 2/12/2012 18.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-A-20120325 3/25/2012 3 ft 23 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-C-20120325 3/25/2012 21 ft 23 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-A-20120408 4/8/2012 1.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-C-20120408 4/8/2012 21 ft 24 ft N
Antimony	1	1	3	3	1.1	1.1	1.1	1.1
Arsenic	0.97	1.05	1.08	1.15	0.94	0.91	0.9	0.88
Barium	14.6	14.4	13.4	14.9	19.8	14.6	14.1	14.2
Beryllium	1	1	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	221000	260000	267000	280000	282000	278000	315000	305000
Chromium	2	2	1.5	4.4	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	2.5	2.9	2.4	2.1	1.1	1.1	2.7	2.7
Iron	467	497	219	277	202	265	404	303
Lead	2	2	1.7	1.7	1.7	1.7	1.7	1.7
Magnesium	812000	860000	1060000	1100000	860000	874000	951000	933000
Manganese	49.1	63.2	25.2	27.3	77.9	49.3	40.5	46.3
Mercury	0.0109	0.0116	0.00588	0.00498	0.00397	0.00605	0.00625	0.00605
Nickel	1	1.4	1.6	3.4	0.8	0.8	0.8	1.5
Potassium	226000	337000	467000	414000	298000	301000	233000	228000
Selenium	1.16	1.16	0.581	0.581	1.16	1.16	1.16	1.16
Silver	1	1	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	7010000	7740000	6920000	7190000	7600000	7700000	8310000	8110000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.7	0.7	0.7	1.6	0.7
Vanadium	2.2	2.6	1.4	1.4	1.4	1.4	1.4	1.4
Zinc	12	12	11.9	11.9	11.9	11.9	15	13.1
Metals, Dissolved (µg/L)								
Aluminum	20	29	20	20	20	20	20	20
Antimony	1	1	1.1	1.1	4.3	3.8	1.1	1.1
Arsenic	0.95	0.98	0.97	0.96	0.58	0.62	0.76	0.8
Barium	13.3	13.8	13.8	13.4	17.1	13.8	13	12.3
Beryllium	1	1	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	225000	254000	263000	275000	270000	271000	255000	268000
Chromium	2	2	2	2	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	1.7	1.9	1.5	1.1	1.1	1.1	1.1	1.2
Iron	130	130	125	125	125	125	125	125
Lead	2	2	1.7	1.7	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.214 NC007SW_20120604 NC007SW-A-20120604 6/4/2012 3 ft 21 ft N	Newtown Creek 0.214 NC007SW_20120604 NC007SW-C-20120604 6/4/2012 20 ft 21 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-A-20120212 2/12/2012 3.2 ft 24 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-C-20120212 2/12/2012 18.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-A-20120325 3/25/2012 3 ft 23 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-C-20120325 3/25/2012 21 ft 23 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-A-20120408 4/8/2012 1.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-C-20120408 4/8/2012 21 ft 24 ft N
Magnesium	782000	846000	1030000	1070000	829000	846000	820000	861000
Manganese	34.4	52.9	17	15.5	67.8	41.4	27.2	32.8
Mercury	0.00038	0.00034	0.00024	0.00027	0.00058	0.00066	0.00015	0.00015
Nickel	1	1	0.8	0.8	0.8	0.8	0.8	0.8
Potassium	221000	247000	452000	400000	287000	292000	273000	288000
Selenium	1.16	1.16	0.581	0.581	1.16	1.16	1.16	1.16
Silver	1	1	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	6660000	7230000	6790000	7020000	7180000	7390000	7230000	7590000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Vanadium	1.3	1.7	1.4	1.4	1.4	1.4	1.4	1.4
Zinc	12	12	11.9	11.9	11.9	11.9	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.000037	0.000048	0.000098	0.000103	0.00002	0.00002	0.000021	0.00002
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	26.06	10	10	10	1.9	10	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.122	10.192	8.112	1.2	8.305	8.474	8.002	1.2
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.11447	0.14301	0.10076	0.0753	0.14829	0.13911	0.07074	0.10374
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.10805	0.13011	0.17069	0.13796	0.30801	0.15157	0.08365	0.10482
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.214 NC007SW_20120604 NC007SW-A-20120604 6/4/2012 3 ft 21 ft N	Newtown Creek 0.214 NC007SW_20120604 NC007SW-C-20120604 6/4/2012 20 ft 21 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-A-20120212 2/12/2012 3.2 ft 24 ft N	Newtown Creek 0.63 NC020_20120206 NC020SW-C-20120212 2/12/2012 18.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-A-20120325 3/25/2012 3 ft 23 ft N	Newtown Creek 0.62 NC020_20120325 NC020SW-C-20120325 3/25/2012 21 ft 23 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-A-20120408 4/8/2012 1.5 ft 24 ft N	Newtown Creek 0.62 NC020_20120408 NC020SW-C-20120408 4/8/2012 21 ft 24 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.018	0.018	0.03827	0.03711	0.17893	0.09	0.03717	0.03917
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	49	49	49	49	50	49	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	0.00358	0.00499	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0329	0.0028
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	9.18698	10.3965	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.0663	0.0713	0.0593	0.0593	0.2463	0.1283	0.006	0.006

Table A3-2
Analytical Surface Water Results

Tributary	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile	0.621	0.621	0.618	0.618	1.17	1.17	1.17	1.17
Location ID	NC020_20120506	NC020_20120506	NC020SW_20120604	NC020SW_20120604	NC034_20120207	NC034_20120207	NC034_20120321	NC034_20120321
Sample ID	NC020SW-A-20120506	NC020SW-C-20120506	NC020SW-A-20120604	NC020SW-C-20120604	NC034SW-A-20120207	NC034SW-C-20120207	NC034SW-A-20120321	NC034SW-C-20120321
Sample Date	5/6/2012	5/6/2012	6/4/2012	6/4/2012	2/7/2012	2/7/2012	3/21/2012	3/21/2012
Sample Depth	3.5 ft	19 ft	1.5 ft	19 ft	3.2 ft	24.5 ft	1 ft	15 ft
Water Column Depth	21 ft	21 ft	25 ft	25 ft	27 ft	27 ft	24.7 ft	24.7 ft
Sample Type	N	N	N	N	N	N	N	N
Water Quality Measurements								
Conductivity (µs/cm)	41877	42379	22588	32989	12667	13824	25932	25596
Dissolved Oxygen (mg/L)	5.39	6.07	8.14	5.6	11.21	11.11	14.47	11.63
pH (su)	7.31	7.45	7.57	7.44	7.58	7.78	8.41	8.16
Salinity (ppth)	34.58	36.39	14.94	23.68	12.15	13.1	22.34	22.92
Temperature (deg C)	14.32	12.93	20.4	18.93	4.88	5.52	11.23	9.41
Turbidity (NTU)	1.4	5.5	4.4	5.1	2.7	5	3.8	5.6
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	180	160	560	650	100	10	10	10
Coliforms, Total	600	640	750	840	110	30	80	70
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	100	96	92	93	100	95	110	100
Ammonia as nitrogen	0.637	0.597	1.84	0.337	0.482	0.481	0.136	0.263
Biochemical Oxygen Demand (BOD-30)	6.34	7.13	23.5	4.19	6.96	7.08	13.3	12.5
Biochemical Oxygen Demand (BOD-5)	2	3.56	5.26	2	2	2	5	3.65
Bromide	38	43	26	38	35	38	30	28
Chloride (total)	12000	14000	9200	12000	11000	12000	12000	12000
Cyanide, total	0.002	0.002	0.0049	0.002	0.003	0.002	0.002	0.002
Hardness	4100	4100	2700	3900	4400	5000	4100	4200
Nitrate + nitrite as nitrogen	0.46	0.4	0.53	0.29	0.54	0.46	0.24	0.26
Nitrogen (Kjeldahl)	1.1	1.2	3	0.82	0.1	0.1	0.63	0.59
Particulate Organic Carbon (POC)	1	1.52	2.87	1	1	1	1.72	2.11
Phosphorus	0.213	0.296	0.448	0.166	0.109	0.146	0.123	0.29
Sulfate	1600	1700	1200	1700	1400	1500	1400	1400
Suspended Sediment - coarse fraction	1.47	2.81	1.3387	0.7387	0	0	0	5.6
Suspended Sediment - fine fraction	3.49	18.91	13.39	10.34	11.2	9.91	9.16	34
Total organic carbon	0.45	0.34	9.6	6.1	0.03	0.03	0.35	0.23
Total suspended solids	10	14	24	38	14	16	24	50
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	N/A	N/A	10	10	1	1	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.47	0.44	0.61	0.93	0.59	0.47	0.22	0.27
Nitrogen (Kjeldahl) - Dissolved	0.06	0.06	1.5	0.06	0.06	0.06	0.28	0.49
Phosphorus - Dissolved	0.144	0.122	0.23	0.131	0.09	0.128	0.021	0.08
Total dissolved solids - Dissolved	22000	24000	17000	24000	20000	22000	22000	22000
Metals (µg/L)								
Aluminum	40	212	33	133	33	88	90	1050

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.621 NC020_20120506 NC020SW-A-20120506 5/6/2012 3.5 ft 21 ft N	Newtown Creek 0.621 NC020_20120506 NC020SW-C-20120506 5/6/2012 19 ft 21 ft N	Newtown Creek 0.618 NC020SW_20120604 NC020SW-A-20120604 6/4/2012 1.5 ft 25 ft N	Newtown Creek 0.618 NC020SW_20120604 NC020SW-C-20120604 6/4/2012 19 ft 25 ft N	Newtown Creek 1.17 NC034_20120207 NC034SW-A-20120207 2/7/2012 3.2 ft 27 ft N	Newtown Creek 1.17 NC034_20120207 NC034SW-C-20120207 2/7/2012 24.5 ft 27 ft N	Newtown Creek 1.17 NC034_20120321 NC034SW-A-20120321 3/21/2012 1 ft 24.7 ft N	Newtown Creek 1.17 NC034_20120321 NC034SW-C-20120321 3/21/2012 15 ft 24.7 ft N
Antimony	1.1	1.1	1	1	0.1	0.1	1.1	1.1
Arsenic	0.88	0.84	0.95	1.01	0.99	0.82	0.78	1.01
Barium	22.4	15.9	21.3	14.2	23.2	14.6	24.6	21.7
Beryllium	1.2	1.2	1	1	0.1	0.1	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.1	0.05	0.5	0.5
Calcium	279000	270000	168000	238000	233000	266000	270000	277000
Chromium	1.5	1.5	2	2	0.2	0.2	1.6	5.5
Cobalt	1	1	1	1	0.2	0.1	1	1
Copper	3	4	4.9	2.5	2.3	0.1	2.1	9
Iron	227	500	167	332	195	193	294	2180
Lead	1.7	2.1	2	2	0.5	0.5	1.7	6.8
Magnesium	829000	837000	546000	800000	916000	1070000	825000	864000
Manganese	85.2	78.2	74.4	56.4	64.5	22.4	115.5	85.6
Mercury	0.00261	0.00706	0.00295	0.00718	0.00186	0.00317	0.00363	0.0321
Nickel	0.9	1.9	2.2	1	0.1	0.1	1.7	2.8
Potassium	188000	188000	194000	275000	245000	255000	284000	297000
Selenium	1.21	1.21	1.16	1.16	0.718	0.642	1.16	1.16
Silver	0.8	0.8	1	1	0.1	0.1	0.8	0.8
Sodium	6900000	6960000	4900000	7080000	5940000	6880000	7190000	7530000
Thallium	0.3	0.3	0.3	0.3	0.03	0.03	0.3	0.3
Tin	0.6	0.6	0.6	0.6	0.7	0.7	1.8	0.7
Vanadium	2.6	2.7	1.4	1.3	1.1	1.3	1.4	1.6
Zinc	11.9	12.6	12	12	19.4	12.3	11.9	11.9
Metals, Dissolved (µg/L)								
Aluminum	20	20	21	20	19	6	20	20
Antimony	8.5	1.1	1	1	1.7	0.1	13.7	11.9
Arsenic	0.85	0.78	0.91	0.99	1.05	0.86	0.81	0.88
Barium	20.7	15.6	20.5	13.5	20.2	13.9	21.2	15.9
Beryllium	1.2	1.2	1	1	0.1	0.1	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.1	0.1	0.5	0.5
Calcium	287000	283000	165000	240000	222000	261000	266000	276000
Chromium	1.5	1.5	2	2	0.4	0.4	1.5	1.5
Cobalt	1	1	1	1	0.3	0.2	1	1
Copper	1.1	1.1	3.5	1.6	0.1	1.2	1.1	1.1
Iron	159	209	130	130	81	69	125	125
Lead	1.7	1.7	2	2	0.2	0.2	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.621 NC020_20120506 NC020SW-A-20120506 5/6/2012 3.5 ft 21 ft N	Newtown Creek 0.621 NC020_20120506 NC020SW-C-20120506 5/6/2012 19 ft 21 ft N	Newtown Creek 0.618 NC020SW_20120604 NC020SW-A-20120604 6/4/2012 1.5 ft 25 ft N	Newtown Creek 0.618 NC020SW_20120604 NC020SW-C-20120604 6/4/2012 19 ft 25 ft N	Newtown Creek 1.17 NC034_20120207 NC034SW-A-20120207 2/7/2012 3.2 ft 27 ft N	Newtown Creek 1.17 NC034_20120207 NC034SW-C-20120207 2/7/2012 24.5 ft 27 ft N	Newtown Creek 1.17 NC034_20120321 NC034SW-A-20120321 3/21/2012 1 ft 24.7 ft N	Newtown Creek 1.17 NC034_20120321 NC034SW-C-20120321 3/21/2012 15 ft 24.7 ft N
Magnesium	929000	928000	548000	825000	862000	1060000	823000	859000
Manganese	80.8	53.9	68.2	52.5	65.7	18.2	92.2	48.9
Mercury	0.0006	0.00065	0.0005	0.00025	0.00019	0.00026	0.00055	0.00102
Nickel	1.8	1.5	2.3	1	1.7	0.8	2.4	0.8
Potassium	185000	184000	156000	240000	232000	273000	283000	297000
Selenium	1.21	1.21	1.16	1.16	0.747	0.7	1.16	1.16
Silver	0.8	0.8	1	1	0.1	0.1	0.8	0.8
Sodium	7630000	7530000	4690000	7020000	5560000	6820000	7140000	7420000
Thallium	0.3	0.3	0.3	0.3	0.03	0.03	0.3	0.3
Tin	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Vanadium	1.4	1.4	1.3	1.8	1.1	1.2	1.4	1.4
Zinc	11.9	11.9	12	12	16.2	10.5	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.00002	0.00002	0.000091	0.000043	0.0001	0.000099	0.000056	0.000081
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	25.81	25.8	28.75	26.99	10	10	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.03	1.2	8.062	8.02	8.136	8.096	8.765	8.215
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.13562	0.1057	0.15947	0.14833	0.1495	0.0711	0.2575	0.15367
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.4273	0.11698	0.71673	0.13651	0.4522	0.15211	0.47254	0.17337
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.05	0.1	0.04	0.04	0.04	0.05	0.05
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	1	0.3
n-Eicosane (C20)	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

	Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 0.621 NC020_20120506 NC020SW-A-20120506 5/6/2012 3.5 ft 21 ft N	Newtown Creek 0.621 NC020_20120506 NC020SW-C-20120506 5/6/2012 19 ft 21 ft N	Newtown Creek 0.618 NC020SW_20120604 NC020SW-A-20120604 6/4/2012 1.5 ft 25 ft N	Newtown Creek 0.618 NC020SW_20120604 NC020SW-C-20120604 6/4/2012 19 ft 25 ft N	Newtown Creek 1.17 NC034_20120207 NC034SW-A-20120207 2/7/2012 3.2 ft 27 ft N	Newtown Creek 1.17 NC034_20120207 NC034SW-C-20120207 2/7/2012 24.5 ft 27 ft N	Newtown Creek 1.17 NC034_20120321 NC034SW-A-20120321 3/21/2012 1 ft 24.7 ft N	Newtown Creek 1.17 NC034_20120321 NC034SW-C-20120321 3/21/2012 15 ft 24.7 ft N
n-Hexadecane (C16)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)		0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1
n-Nonacosane (C29)		0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)		0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
n-Nonatriacontane (C39)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane		0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1
n-Pentacosane (C25)		1	1	1	1	1	1	1	1
n-Pentadecane (C15)		0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2
n-Pentatriacontane (C35)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)		0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)		0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)		1	1	1	1	1	1	1	1
n-Tritriacontane (C33)		0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
n-Undecane (C11)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)									
Total Pesticides (U = MDL)		0.03654	0.03863	0.018	0.018	0.03701	0.03741	0.18057	0.091
Herbicides (µg/L)									
Total Herbicides (U = MDL)		49	49	49	49	50	49	50	49
Dioxin Furans (ng/L)									
Total DFs (U = MDL)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)									
Total PCB Aroclor (U = MDL)		0.0028	0.0028	0.014	0.0028	0.0028	0.0028	0.0028	0.0029
PCB Congeners (ng/L)									
Total PCB Congener (U = MDL)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)									
Total TPH (U = MDL)		0.0713	0.0373	0.6365	0.0913	0.0473	0.006	0.2523	0.1303

Table A3-2
Analytical Surface Water Results

Tributary	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile	1.171	1.171	1.159	1.159	1.164	1.164	1.53	1.53
Location ID	NC034_20120403	NC034_20120403	NC034_20120507	NC034_20120507	NC034SW_20120602	NC034SW_20120602	NC046_20120207	NC046_20120207
Sample ID	NC034SW-A-20120403	NC034SW-C-20120403	NC034SW-A-20120507	NC034SW-C-20120507	NC034SW-A-20120603	NC034SW-C-20120603	NC046SW-A-20120207	NC046SW-C-20120207
Sample Date	4/3/2012	4/3/2012	5/7/2012	5/7/2012	6/3/2012	6/3/2012	2/7/2012	2/7/2012
Sample Depth	3 ft	21 ft	3 ft	18 ft	1.5 ft	20 ft	3.2 ft	2 ft
Water Column Depth	23 ft	23 ft	22 ft	22 ft	26 ft	26 ft	22.7 ft	22.7 ft
Sample Type	N	N	N	N	N	N	N	N
Water Quality Measurements								
Conductivity (µs/cm)	24736	26082	28666	28748	27917	31889	12143	13629
Dissolved Oxygen (mg/L)	8.95	8.36	6.43	6.43	11.35	4.89	9.88	10.82
pH (su)	7.86	7.81	7.41	7.44	7.91	7.32	7.64	7.83
Salinity (ppth)	21.28	23.25	22.8	23.45	18.62	22.83	11.46	12.86
Temperature (deg C)	10.71	9.64	14.27	13.31	21.62	18.87	5.32	5.64
Turbidity (NTU)	4.6	6.2	2.2	4.6	2.4	4.6	2.5	3.9
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	90	70	130	100	9200	4700	10	10
Coliforms, Total	3100	430	580	340	20000	6750	30	50
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	100	97	100	99	91	94.5	110	96
Ammonia as nitrogen	0.392	0.48	0.56	0.535	0.106	0.347	0.474	0.43
Biochemical Oxygen Demand (BOD-30)	5.9	5.7	6.9	4.065	19.5	11.25	6.24	6.36
Biochemical Oxygen Demand (BOD-5)	4.7	2.1	2	2	7.58	2	2	2
Bromide	39	44	33	34.5	30	37.5	30	37
Chloride (total)	13000	14000	12000	12500	10000	13000	10000	12000
Cyanide, total	0.002	0.003	0.002	0.002	0.004	0.003	0.003	0.002
Hardness	3700	4200	4000	4200	3300	3800	4700	5300
Nitrate + nitrite as nitrogen	0.43	0.35	0.45	0.435	0.24	0.285	0.62	0.45
Nitrogen (Kjeldahl)	1	0.8	1.1	0.65	1.3	0.945	0.1	0.1
Particulate Organic Carbon (POC)	1.45	1.04	1	1	2.67	1	1	1
Phosphorus	0.15	0.147	0.177	0.1835	0.239	0.2035	0.154	0.109
Sulfate	1700	1700	1400	1550	1400	1650	1300	1500
Suspended Sediment - coarse fraction	2.74	1.66	1.69	3.25	0.3654	1.40025	0	0
Suspended Sediment - fine fraction	6.21	8.32	3.95	5.175	14.07	10.695	7.48	8.8
Total organic carbon	0.37	0.2	0.43	0.405	7.8	6.1	0.03	0.03
Total suspended solids	9	12	11	9.95	32	33	20	17
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	N/A	N/A	N/A	N/A	10	10	1	1
Nitrate + nitrite as nitrogen - Dissolved	0.4	0.35	0.44	0.445	0.36	0.415	0.55	0.45
Nitrogen (Kjeldahl) - Dissolved	0.72	0.62	0.06	0.06	0.06	0.55	0.77	0.06
Phosphorus - Dissolved	0.072	0.112	0.136	0.1595	0.102	0.148	0.073	0.114
Total dissolved solids - Dissolved	21000	23000	23000	23000	20000	24000	19000	22000
Metals (µg/L)								
Aluminum	30	150	46	98	32	133	31	72

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 1.171 NC034_20120403 NC034SW-A-20120403 4/3/2012 3 ft 23 ft N	Newtown Creek 1.171 NC034_20120403 NC034SW-C-20120403 4/3/2012 21 ft 23 ft N	Newtown Creek 1.159 NC034_20120507 NC034SW-A-20120507 5/7/2012 3 ft 22 ft N	Newtown Creek 1.159 NC034_20120507 NC034SW-C-20120507 5/7/2012 18 ft 22 ft N	Newtown Creek 1.164 NC034SW_20120602 NC034SW-A-20120603 6/3/2012 1.5 ft 26 ft N	Newtown Creek 1.164 NC034SW_20120602 NC034SW-C-20120603 6/3/2012 20 ft 26 ft N	Newtown Creek 1.53 NC046_20120207 NC046SW-A-20120207 2/7/2012 3.2 ft 22.7 ft N	Newtown Creek 1.53 NC046_20120207 NC046SW-C-20120207 2/7/2012 2 ft 22.7 ft N
Antimony	1.1	1.1	1.1	3.05	1	1	0.1	0.1
Arsenic	1.15	0.85	0.93	0.875	1.19	1.145	1.12	0.86
Barium	23.4	14.6	19.7	17.75	21.5	13	27.9	16.1
Beryllium	1.2	1.2	1.2	1.2	1	1	0.1	0.1
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1
Calcium	256000	284000	267000	279000	201000	229000	250000	276000
Chromium	1.5	1.5	1.5	1.6	2	2	0.2	0.2
Cobalt	1	1	1	1	1	1	0.3	0.1
Copper	4.6	3.7	1.8	2.55	2.9	2.7	2.5	0.1
Iron	280	336	261	315	305	370	223	179
Lead	1.7	1.7	1.7	1.7	2	2	0.6	0.5
Magnesium	746000	845000	806000	858000	687000	786500	994000	1110000
Manganese	89.7	51	82.1	66.95	84.1	58.7	82.3	27.8
Mercury	0.00489	0.00835	0.00292	0.003875	0.00304	0.00691	0.00178	0.00223
Nickel	2.5	0.8	1.7	1.6	1.9	1.05	2.8	0.1
Potassium	242000	273000	179000	191500	194000	225000	248000	292000
Selenium	1.16	1.16	1.21	1.21	1.16	1.17	0.728	0.605
Silver	0.8	0.8	0.8	0.8	1	1	0.1	0.1
Sodium	6400000	7240000	6740000	7180000	5850000	6680000	6400000	7100000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.03	0.03
Tin	0.7	1.2	0.6	0.6	0.6	0.6	0.7	0.7
Vanadium	1.4	1.4	1.9	1.8	1.9	1.9	1.1	1.4
Zinc	12.5	11.9	11.9	11.9	12	12	18.9	11
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	20	20	6	6
Antimony	1.1	1.1	2.5	2.4	1	1	0.1	0.1
Arsenic	0.9	0.93	0.84	0.795	1.1	1.085	0.93	0.9
Barium	21	13.4	17.6	16.5	21.1	13.7	20.3	14
Beryllium	1.2	1.2	1.2	1.2	1	1	0.1	0.1
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.05
Calcium	238000	276000	285000	281000	212000	242500	235000	240000
Chromium	1.5	1.5	1.5	1.5	2	2	0.4	0.4
Cobalt	1	1	1	1	1	1	0.3	0.2
Copper	2.2	1.3	1.5	1.85	2.1	1.4	0.1	1.5
Iron	125	125	149	155	130	130	62	64
Lead	1.7	1.7	1.7	1.7	2	2	0.2	0.3

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 1.171 NC034_20120403 NC034SW-A-20120403 4/3/2012 3 ft 23 ft N	Newtown Creek 1.171 NC034_20120403 NC034SW-C-20120403 4/3/2012 21 ft 23 ft N	Newtown Creek 1.159 NC034_20120507 NC034SW-A-20120507 5/7/2012 3 ft 22 ft N	Newtown Creek 1.159 NC034_20120507 NC034SW-C-20120507 5/7/2012 18 ft 22 ft N	Newtown Creek 1.164 NC034SW_20120602 NC034SW-A-20120603 6/3/2012 1.5 ft 26 ft N	Newtown Creek 1.164 NC034SW_20120602 NC034SW-C-20120603 6/3/2012 20 ft 26 ft N	Newtown Creek 1.53 NC046_20120207 NC046SW-A-20120207 2/7/2012 3.2 ft 22.7 ft N	Newtown Creek 1.53 NC046_20120207 NC046SW-C-20120207 2/7/2012 2 ft 22.7 ft N
Magnesium	779000	928000	899000	892500	715000	834000	936000	990000
Manganese	85.5	43.2	78.4	61.55	73.5	61.1	52.3	23.1
Mercury	0.00385	0.0025	0.00065	0.00055	0.00043	0.000235	0.00017	0.0002
Nickel	2.9	0.8	2.3	0.8	1.6	1	1.9	0.7
Potassium	243000	286000	179000	183000	203000	238500	248000	248000
Selenium	1.16	1.16	1.21	1.21	1.16	1.16	0.9	0.605
Silver	0.8	0.8	0.8	0.8	1	1	0.1	0.1
Sodium	6560000	7810000	7420000	7325000	6070000	7100000	6050000	6400000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.03	0.03
Tin	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7
Vanadium	1.4	1.4	1.4	1.4	2.5	1.95	1	1.2
Zinc	11.9	11.9	11.9	11.9	12	12	14.6	10.3
Organometallic Compounds (µg/L)								
Methyl mercury	0.00002	0.000022	0.00002	0.0000195	0.000073	0.000047	0.000099	0.0001
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	10	10	15.79	25.76	27.96	10	25.76	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	1.2	1.2	1.3	1.4	8.142	8.195	8.166	8.086
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.1387	0.09708	0.13591	0.20578	0.12344	0.16689	0.18611	0.07304
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.50767	0.15127	0.38604	0.239845	0.49221	0.141775	0.56464	0.16546
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.045	0.04	0.04	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.15	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

	Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 1.171 NC034_20120403 NC034SW-A-20120403 4/3/2012 3 ft 23 ft N	Newtown Creek 1.171 NC034_20120403 NC034SW-C-20120403 4/3/2012 21 ft 23 ft N	Newtown Creek 1.159 NC034_20120507 NC034SW-A-20120507 5/7/2012 3 ft 22 ft N	Newtown Creek 1.159 NC034_20120507 NC034SW-C-20120507 5/7/2012 18 ft 22 ft N	Newtown Creek 1.164 NC034SW_20120602 NC034SW-A-20120603 6/3/2012 1.5 ft 26 ft N	Newtown Creek 1.164 NC034SW_20120602 NC034SW-C-20120603 6/3/2012 20 ft 26 ft N	Newtown Creek 1.53 NC046_20120207 NC046SW-A-20120207 2/7/2012 3.2 ft 22.7 ft N	Newtown Creek 1.53 NC046_20120207 NC046SW-C-20120207 2/7/2012 2 ft 22.7 ft N
n-Hexadecane (C16)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
n-Hexatriacontane (C36)		0.1	0.1	0.1	0.15	0.1	0.1	0.1	0.1
n-Nonacosane (C29)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)		0.3	0.3	0.3	0.35	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane		0.1	0.1	0.1	0.15	0.1	0.1	0.1	0.1
n-Pentacosane (C25)		1	1	1	1	1	1	1	1
n-Pentadecane (C15)		0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
n-Pentatriacontane (C35)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)		1	1	1	1	1	1	1	1
n-Tritriacontane (C33)		0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1
n-Undecane (C11)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)									
Total Pesticides (U = MDL)		0.18	0.03892	0.03899	0.03936	0.018	0.018	0.04672	0.03922
Herbicides (µg/L)									
Total Herbicides (U = MDL)		50	49	53	58	49	49	49	49
Dioxin Furans (ng/L)									
Total DFs (U = MDL)		N/A	N/A	N/A	N/A	N/A	N/A	0.00432	0.00417
PCB Aroclors (µg/L)									
Total PCB Aroclor (U = MDL)		0.245	0.0028	0.003	0.003	0.014	0.0028	0.0028	0.0028
PCB Congeners (ng/L)									
Total PCB Congener (U = MDL)		N/A	N/A	N/A	N/A	N/A	N/A	3.58214	2.67011
Total Petroleum Hydrocarbons (mg/L)									
Total TPH (U = MDL)		0.2673	0.1373	0.1223	0.1133	0.4133	0.1043	0.0503	0.006

Table A3-2
Analytical Surface Water Results

Tributary	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile	1.53	1.53	1.529	1.529	1.535	1.535	1.537	1.537
Location ID	NC046_20120320	NC046_20120320	NC046_20120408	NC046_20120408	NC046_20120510	NC046_20120510	NC046SW_20120603	NC046SW_20120603
Sample ID	NC046SW-A-20120320	NC046SW-C-20120320	NC046SW-A-20120408	NC046SW-C-20120408	NC046SW-A-20120510	NC046SW-C-20120510	NC046SW-A-20120603	NC046SW-C-20120603
Sample Date	3/20/2012	3/20/2012	4/8/2012	4/8/2012	5/10/2012	5/10/2012	6/3/2012	6/3/2012
Sample Depth	2 ft	15 ft	2.5 ft	23 ft	3 ft	23.5 ft	1.5 ft	20 ft
Water Column Depth	24 ft	24 ft	26 ft	26 ft	27 ft	27 ft	25 ft	25 ft
Sample Type	N	N	N	N	N	N	N	N
Water Quality Measurements								
Conductivity (µs/cm)	25695	25032	26500	26804	28185	28445	25012	31974
Dissolved Oxygen (mg/L)	18.98	11.32	8.58	8.4	9.29	5.56	14.86	5.45
pH (su)	8.64	8.18	7.84	7.84	7.72	7.32	8.23	7.41
Salinity (ppth)	22.28	22.71	23.14	23.49	22.01	22.78	16.47	22.92
Temperature (deg C)	10.68	8.88	10.36	10.36	14.93	13.96	21.03	18.92
Turbidity (NTU)	5.1	44	7.2	9.7	3	2.6	2.8	3.7
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	10	10	20	40	3500	2300	7000	3700
Coliforms, Total	10	10	220	100	8000	8600	7500	8500
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	110	100	100	98	98	98	89	91
Ammonia as nitrogen	0.048	0.324	0.276	0.349	0.434	0.502	0.058	0.382
Biochemical Oxygen Demand (BOD-30)	16.9	12.6	6.39	5.97	7.86	9.68	16.3	11.1
Biochemical Oxygen Demand (BOD-5)	7.9	3.28	2.59	2	3.02	2	7.99	2
Bromide	29	32	39	37	38	37	29	36
Chloride (total)	12000	13000	14000	14000	12000	13000	9300	13000
Cyanide, total	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Hardness	4200	4300	4500	4600	4600	4900	3000	4000
Nitrate + nitrite as nitrogen	0.17	0.25	0.34	0.29	0.5	0.47	0.26	0.31
Nitrogen (Kjeldahl)	0.66	0.68	0.76	0.71	1.2	0.89	1.2	1.1
Particulate Organic Carbon (POC)	2.61	1.38	1.37	1	1	1	2.38	1
Phosphorus	0.144	0.158	0.128	0.135	0.17	0.2	0.272	0.22
Sulfate	1400	1400	1600	1800	1500	1500	1300	1700
Suspended Sediment - coarse fraction	19.6	0	0.74	1.91	0.38	1.75	0.9309	0.5739
Suspended Sediment - fine fraction	8.34	7.96	7	14.3	5.96	6.23	11.36	14.35
Total organic carbon	0.41	0.29	0.29	0.03	1.3	0.78	7.9	5.8
Total suspended solids	25	13	10	16	8.4	9.1	29	37
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	1	1	N/A	N/A	4	4	10	10
Nitrate + nitrite as nitrogen - Dissolved	0.15	0.34	0.34	0.3	0.5	0.45	0.39	0.53
Nitrogen (Kjeldahl) - Dissolved	0.28	0.54	0.61	0.65	0.66	0.68	0.06	0.7
Phosphorus - Dissolved	0.017	0.07	0.07	0.087	0.124	0.108	0.083	0.149
Total dissolved solids - Dissolved	22000	22000	22000	23000	23000	23000	17000	24000
Metals (µg/L)								
Aluminum	65	117	85	165	48	69	52	136

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 1.53 NC046_20120320 NC046SW-A-20120320 3/20/2012 2 ft 24 ft N	Newtown Creek 1.53 NC046_20120320 NC046SW-C-20120320 3/20/2012 15 ft 24 ft N	Newtown Creek 1.529 NC046_20120408 NC046SW-A-20120408 4/8/2012 2.5 ft 26 ft N	Newtown Creek 1.529 NC046_20120408 NC046SW-C-20120408 4/8/2012 23 ft 26 ft N	Newtown Creek 1.535 NC046_20120510 NC046SW-A-20120510 5/10/2012 3 ft 27 ft N	Newtown Creek 1.535 NC046_20120510 NC046SW-C-20120510 5/10/2012 23.5 ft 27 ft N	Newtown Creek 1.537 NC046SW_20120603 NC046SW-A-20120603 6/3/2012 1.5 ft 25 ft N	Newtown Creek 1.537 NC046SW_20120603 NC046SW-C-20120603 6/3/2012 20 ft 25 ft N
Antimony	1.1	1.1	1.1	1.1	1.1	1.1	1	1
Arsenic	0.84	0.68	1.02	1.03	1.2	1.37	1.17	1.13
Barium	21.8	18.1	21.9	14.7	18.2	17.1	21.8	13.8
Beryllium	1.2	1.2	1.2	1.2	1.2	1.2	1	1
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	277000	283000	300000	308000	238000	267000	179000	246000
Chromium	1.5	2.2	1.5	1.5	1.5	1.5	2	2
Cobalt	1	1	1	1	1	1	1	1
Copper	2.3	2.6	3.6	3.1	2	2.2	3.5	2.6
Iron	211	325	452	373	214	307	297	349
Lead	1.7	1.7	1.7	1.7	1.7	1.7	2	2
Magnesium	848000	875000	902000	923000	975000	1020000	615000	836000
Manganese	69.3	57.6	85.6	59.1	77.9	72.1	96.3	55.3
Mercury	0.00306	0.00477	0.00451	0.00743	0.00342	0.00434	0.00374	0.0084
Nickel	1.4	1.1	2.5	1.6	1.3	1.6	1.7	1.1
Potassium	293000	302000	216000	227000	273000	279000	172000	244000
Selenium	1.16	1.16	1.16	1.16	1.21	1.21	1.4	1.17
Silver	0.8	0.8	0.8	0.8	0.8	0.8	1	1
Sodium	7390000	7630000	7770000	8060000	6860000	7180000	5250000	7140000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	4.8	1.3	1	0.6	0.6	0.6	0.6
Vanadium	1.4	1.4	1.4	1.4	1.4	1.4	1.9	1.9
Zinc	11.9	11.9	15.6	11.9	11.9	11.9	12	12
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	20	47	20	20
Antimony	50	17.2	1.1	1.1	1.1	1.1	1	1
Arsenic	0.75	0.84	0.75	0.73	0.9	0.95	1.01	1.06
Barium	19.1	15.5	16.3	13.7	15.9	16.2	20.3	12.4
Beryllium	1.2	1.2	1.2	1.2	1.2	1.2	1	1
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	269000	265000	251000	252000	249000	256000	186000	245000
Chromium	1.5	1.5	1.5	1.5	1.5	1.5	2	2
Cobalt	1	1	1	1	1	1	1	1
Copper	1.1	1.1	1.4	1.1	1.3	1.1	2.4	1.3
Iron	125	125	125	125	160	196	130	130
Lead	1.7	1.7	1.7	1.7	1.7	1.7	2	2

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 1.53 NC046_20120320 NC046SW-A-20120320 3/20/2012 2 ft 24 ft N	Newtown Creek 1.53 NC046_20120320 NC046SW-C-20120320 3/20/2012 15 ft 24 ft N	Newtown Creek 1.529 NC046_20120408 NC046SW-A-20120408 4/8/2012 2.5 ft 26 ft N	Newtown Creek 1.529 NC046_20120408 NC046SW-C-20120408 4/8/2012 23 ft 26 ft N	Newtown Creek 1.535 NC046_20120510 NC046SW-A-20120510 5/10/2012 3 ft 27 ft N	Newtown Creek 1.535 NC046_20120510 NC046SW-C-20120510 5/10/2012 23.5 ft 27 ft N	Newtown Creek 1.537 NC046SW_20120603 NC046SW-A-20120603 6/3/2012 1.5 ft 25 ft N	Newtown Creek 1.537 NC046SW_20120603 NC046SW-C-20120603 6/3/2012 20 ft 25 ft N
Magnesium	812000	822000	789000	798000	948000	982000	636000	841000
Manganese	60.7	50	70.9	44	70.3	71.6	77.4	50.5
Mercury	0.00036	0.00029	0.00015	0.00015	0.00052	0.00015	0.00043	0.00029
Nickel	1.2	0.8	0.8	0.8	1.9	0.9	1.8	1
Potassium	278000	285000	263000	267000	264000	273000	176000	239000
Selenium	1.16	1.16	1.26	1.16	1.21	1.21	1.57	1.2
Silver	0.8	0.8	0.8	0.8	0.8	0.8	1	1
Sodium	7050000	7090000	6890000	7020000	6670000	6980000	5400000	7130000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Vanadium	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.1
Zinc	11.9	11.9	11.9	11.9	11.9	11.9	12	12
Organometallic Compounds (µg/L)								
Methyl mercury	0.00002	0.00002	0.000021	0.00002	0.00002	0.000019	0.000069	0.000038
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	10	10	10	10	26.66	10	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.621	8.268	1.2	1.2	1.2	8.132	11.002	8.318
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.1675	0.14759	0.10401	0.12468	0.10581	0.10546	0.12733	0.17755
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.36356	0.31673	0.29919	0.12384	0.61202	0.16707	0.64975	0.14236
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.05	0.04	0.04	0.1	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	1	1	0.1	0.1	1	1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile	1.53	1.53	1.529	1.529	1.535	1.535	1.537	1.537
Location ID	NC046_20120320	NC046_20120320	NC046_20120408	NC046_20120408	NC046_20120510	NC046_20120510	NC046SW_20120603	NC046SW_20120603
Sample ID	NC046SW-A-20120320	NC046SW-C-20120320	NC046SW-A-20120408	NC046SW-C-20120408	NC046SW-A-20120510	NC046SW-C-20120510	NC046SW-A-20120603	NC046SW-C-20120603
Sample Date	3/20/2012	3/20/2012	4/8/2012	4/8/2012	5/10/2012	5/10/2012	6/3/2012	6/3/2012
Sample Depth	2 ft	15 ft	2.5 ft	23 ft	3 ft	23.5 ft	1.5 ft	20 ft
Water Column Depth	24 ft	24 ft	26 ft	26 ft	27 ft	27 ft	25 ft	25 ft
Sample Type	N	N	N	N	N	N	N	N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.19	0.09	0.3709	0.03764	0.03679	0.0374	0.018	0.018
Herbicides (µg/L)								
Total Herbicides (U = MDL)	51	50	49	49	49	49	49	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	0.060959	0.12461	0.16809	0.071455	0.019115	0.0024	0.0042	0.00405
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0029	0.0028	0.029	0.0028	0.0554	0.0364	0.014	0.0028
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	6.13533	6.55622	6.85244	7.42461	4.70133	6.06957	9.668	8.09188
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.3783	0.1843	0.0953	0.006	0.0103	0.006	0.4544	0.1053

Table A3-2
Analytical Surface Water Results

Tributary	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile	2.33	2.33	2.33	2.33	2.331	2.331	2.316	2.316
Location ID	NC068_20120209	NC068_20120209	NC068_20120319	NC068_20120319	NC068_20120402	NC068_20120402	NC068_20120507	NC068_20120507
Sample ID	NC068SW-A-20120209	NC068SW-C-20120209	NC068SW-A-20120319	NC068SW-C-20120319	NC068SW-A-20120402	NC068SW-C-20120402	NC068SW-A-20120507	NC068SW-C-20120507
Sample Date	2/9/2012	2/9/2012	3/19/2012	3/19/2012	4/2/2012	4/2/2012	5/7/2012	5/7/2012
Sample Depth	3.2 ft	14 ft	3 ft	13 ft	1.5 ft	21. ft	2.5 ft	19 ft
Water Column Depth	15.5 ft	15.5 ft	19 ft	19 ft	21 ft	21 ft	23 ft	23 ft
Sample Type	FD	N	N	N	N	N	N	N
Water Quality Measurements								
Conductivity (µs/cm)	12706	13645	24302	24249	25061	25877	28443	28350
Dissolved Oxygen (mg/L)	9.59	9.83	19.55	10.71	8.11	6.74	6.07	4.84
pH (su)	7.64	7.77	8.65	8.11	7.84	7.65	7.36	7.26
Salinity (ppth)	11.96	12.93	20.38	22.28	21.31	22.75	22.46	23.03
Temperature (deg C)	5.51	5.5	11.37	8.31	11.2	10.11	14.5	13.9
Turbidity (NTU)	2.3	6.7	4.9	3.9	5.4	5.8	1.4	1.9
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	10	15	10	10	650	190	240	70
Coliforms, Total	15	40	10	20	2800	4200	940	480
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	100	100	110	100	100	100	100	100
Ammonia as nitrogen	0.554	0.52	0.074	0.326	0.493	0.618	0.603	0.667
Biochemical Oxygen Demand (BOD-30)	5.135	5.23	14.5	15.1	9.66	6.69	7.42	5.33
Biochemical Oxygen Demand (BOD-5)	2	2	7.98	3.69	4.93	2.39	2	2
Bromide	31.5	35	28	26	37	49	45	39
Chloride (total)	11000	12000	12000	13000	13000	14000	12000	12000
Cyanide, total	0.003	0.0035	0.003	0.003	0.002	0.002	0.002	0.002
Hardness	4650	4600	4100	4400	3900	4000	4000	4100
Nitrate + nitrite as nitrogen	0.575	0.495	0.16	0.26	0.41	0.29	0.42	0.4
Nitrogen (Kjeldahl)	0.875	0.825	0.68	0.75	1.1	1	1.1	1.1
Particulate Organic Carbon (POC)	1	1	3.12	1.52	1.71	1	1	1
Phosphorus	0.1285	0.1405	0.145	0.214	0.166	0.229	0.185	0.215
Sulfate	1350	1500	1400	1400	1600	1700	1500	1500
Suspended Sediment - coarse fraction	0	0	3.07	0	3.72	3.75	1.25	0.98
Suspended Sediment - fine fraction	7.4	8.825	8.82	6.02	5.76	8.61	4.28	4.91
Total organic carbon	0.14	0.095	0.43	0.31	0.41	0.24	0.56	0.39
Total suspended solids	11.1	18	26	13	9.4	15	16	10
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	1	1	N/A	N/A	N/A	N/A	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.58	0.495	0.19	0.25	0.39	0.31	0.44	0.4
Nitrogen (Kjeldahl) - Dissolved	0.81	0.75	0.24	0.52	0.68	0.77	0.06	0.06
Phosphorus - Dissolved	0.1025	0.1075	0.017	0.056	0.073	0.103	0.158	0.134
Total dissolved solids - Dissolved	20000	22000	22000	23000	21000	23000	23000	23000
Metals (µg/L)								
Aluminum	21.5	84.5	58	86	60	123	28	53

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.33 NC068_20120209 NC068SW-A-20120209 2/9/2012 3.2 ft 15.5 ft FD	Newtown Creek 2.33 NC068_20120209 NC068SW-C-20120209 2/9/2012 14 ft 15.5 ft N	Newtown Creek 2.33 NC068_20120319 NC068SW-A-20120319 3/19/2012 3 ft 19 ft N	Newtown Creek 2.33 NC068_20120319 NC068SW-C-20120319 3/19/2012 13 ft 19 ft N	Newtown Creek 2.331 NC068_20120402 NC068SW-A-20120402 4/2/2012 1.5 ft 21 ft N	Newtown Creek 2.331 NC068_20120402 NC068SW-C-20120402 4/2/2012 21 ft 21 ft N	Newtown Creek 2.316 NC068_20120507 NC068SW-A-20120507 5/7/2012 2.5 ft 23 ft N	Newtown Creek 2.316 NC068_20120507 NC068SW-C-20120507 5/7/2012 19 ft 23 ft N
Antimony	28.5	47	7.5	1.1	1.1	1.5	1.1	1.1
Arsenic	1.345	1.585	0.76	0.9	1.07	1.63	0.91	0.98
Barium	22.25	17.7	22.4	18	22.2	17.7	22.7	19.7
Beryllium	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	240000	253000	272000	287000	265000	272000	270000	276000
Chromium	1.5	1.8	1.7	1.5	1.5	1.8	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	2.2	16.25	4.6	6.3	5	11.5	2.3	2.8
Iron	170	307	235	276	353	691	272	363
Lead	1.7	4	1.7	1.7	1.8	3.5	1.7	1.7
Magnesium	980000	966500	834000	884000	781000	810000	812000	827000
Manganese	58.95	40.8	69.3	58.9	82.5	72.6	83	70.9
Mercury	0.00212	0.015925	0.0043	0.00497	0.00712	0.0178	0.00213	0.00506
Nickel	1.65	3.1	1.4	2.6	2.6	3.3	2.2	1.9
Potassium	327000	430500	287000	306000	250000	260000	182000	186000
Selenium	0.641	0.6805	1.16	1.16	1.32	1.16	1.21	1.21
Silver	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	6380000	6405000	7260000	7680000	6650000	6930000	6750000	6920000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.7	0.7	1	0.7	1.1	0.6	0.6
Vanadium	1.4	1.4	1.4	1.4	1.4	1.4	3	2.8
Zinc	23.55	31.75	11.9	11.9	15.8	19.5	11.9	11.9
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	20	20	20	20
Antimony	19.45	1.1	9.7	10.4	1.1	1.1	2.2	2.6
Arsenic	1.04	0.945	0.69	0.82	0.92	1.19	0.86	0.87
Barium	21.15	16.2	21	15.9	20.2	16.9	21.9	17.6
Beryllium	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	238000	252000	269000	266000	244000	264000	286000	281000
Chromium	1.7	1.75	2.2	1.6	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	1.1	1.1	1.2	1.1	1.7	1.1	157.7	1.1
Iron	125	125	125	125	125	125	399	337
Lead	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.33 NC068_20120209 NC068SW-A-20120209 2/9/2012 3.2 ft 15.5 ft FD	Newtown Creek 2.33 NC068_20120209 NC068SW-C-20120209 2/9/2012 14 ft 15.5 ft N	Newtown Creek 2.33 NC068_20120319 NC068SW-A-20120319 3/19/2012 3 ft 19 ft N	Newtown Creek 2.33 NC068_20120319 NC068SW-C-20120319 3/19/2012 13 ft 19 ft N	Newtown Creek 2.331 NC068_20120402 NC068SW-A-20120402 4/2/2012 1.5 ft 21 ft N	Newtown Creek 2.331 NC068_20120402 NC068SW-C-20120402 4/2/2012 21 ft 21 ft N	Newtown Creek 2.316 NC068_20120507 NC068SW-A-20120507 5/7/2012 2.5 ft 23 ft N	Newtown Creek 2.316 NC068_20120507 NC068SW-C-20120507 5/7/2012 19 ft 23 ft N
Magnesium	895000	968000	826000	829000	794000	866000	908000	906000
Manganese	55.85	34.7	60.9	48.8	72.9	69.2	92.8	70.1
Mercury	0.00019	0.00022	0.00029	0.00028	0.00457	0.00313	0.00064	0.00087
Nickel	1.85	0.8	1.4	1.8	1.6	1.7	17.6	1
Potassium	395500	427500	285000	285000	247000	273000	181000	180000
Selenium	0.618	0.6535	1.16	1.16	1.16	1.3	1.21	1.21
Silver	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Sodium	5890000	6390000	7120000	7140000	6660000	7320000	7360000	7440000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
Vanadium	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Zinc	11.9	12.05	11.9	11.9	11.9	11.9	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.000111	0.0001055	0.00002	0.000019	0.000028	0.000019	0.00002	0.00002
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	10	10	25.87	10	10	10	26.05	25.82
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.157	1.2	1.2	8.451	1.2	1.2	1.2	1.3
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.19568	0.749515	0.20986	0.18363	0.18347	0.18674	0.10766	0.13292
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.535305	2.16735	0.4704	0.4541	0.57762	0.49184	0.39599	0.37792
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.2
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.1	0.04	0.05	0.04	0.04	0.04	0.05
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	2	0.5	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.15	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile	2.33	2.33	2.33	2.33	2.331	2.331	2.316	2.316
Location ID	NC068_20120209	NC068_20120209	NC068_20120319	NC068_20120319	NC068_20120402	NC068_20120402	NC068_20120507	NC068_20120507
Sample ID	NC068SW-A-20120209	NC068SW-C-20120209	NC068SW-A-20120319	NC068SW-C-20120319	NC068SW-A-20120402	NC068SW-C-20120402	NC068SW-A-20120507	NC068SW-C-20120507
Sample Date	2/9/2012	2/9/2012	3/19/2012	3/19/2012	4/2/2012	4/2/2012	5/7/2012	5/7/2012
Sample Depth	3.2 ft	14 ft	3 ft	13 ft	1.5 ft	21. ft	2.5 ft	19 ft
Water Column Depth	15.5 ft	15.5 ft	19 ft	19 ft	21 ft	21 ft	23 ft	23 ft
Sample Type	FD	N	N	N	N	N	N	N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.15	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.038975	0.039605	0.18037	0.089	0.3608	0.03728	0.03703	0.0386
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	49	49	50	49	50	50	49
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0028	0.0485	0.0028	0.0028	0.028	0.0028	0.0028	0.0028
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.1178	0.361	0.5613	0.1873	0.3093	0.1863	0.1453	0.1223

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.317 NC068SW_20120603 NC068SW-A-20120603 6/3/2012 2.5 ft 22 ft N	Newtown Creek 2.317 NC068SW_20120603 NC068SW-C-20120603 6/3/2012 17 ft 22 ft N	Newtown Creek 2.45 NC070_20120206 NC070SW-A-20120206 2/6/2012 3.2 ft 18 ft N	Newtown Creek 2.45 NC070_20120206 NC070SW-C-20120206 2/6/2012 16.5 ft 18 ft N	Newtown Creek 2.44 NC070_20120324 NC070SW-A-20120325 3/25/2012 3 ft 23 ft N	Newtown Creek 2.44 NC070_20120324 NC070SW-C-20120325 3/25/2012 17 ft 23 ft N	Newtown Creek 2.437 NC070_20120405 NC070SW-A-20120405 4/5/2012 1 ft 18 ft N	Newtown Creek 2.437 NC070_20120405 NC070SW-C-20120405 4/5/2012 15.5 ft 18 ft N
Water Quality Measurements								
Conductivity (µs/cm)	25876	31526	11628	13316	25745	26131	25049	25817
Dissolved Oxygen (mg/L)	8.85	3.8	9.14	10.2	11.68	9.78	9.61	7
pH (su)	7.62	7.17	6.88	7.62	8.15	8.03	7.91	7.66
Salinity (ppth)	18.2	22.43	11.2	12.57	22.45	22.88	20.82	22.42
Temperature (deg C)	20.35	19.14	4.5	5.55	10.42	10.28	12.08	10.57
Turbidity (NTU)	4.3	1.1	2.3	3	3.5	6	5.4	6.7
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	8000	6700	20	10	65	10	120	70
Coliforms, Total	20000	8000	60	10	265	30	640	320
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	84	95	110	96	100	100	110	100
Ammonia as nitrogen	0.263	0.389	0.545	0.455	0.1905	0.357	0.377	0.54
Biochemical Oxygen Demand (BOD-30)	40.9	11.8	6.93	6.96	21.75	20.5	9.33	7.53
Biochemical Oxygen Demand (BOD-5)	12	2	2.29	2.24	6.38	4.79	6.74	2
Bromide	34	38	30	34	41.5	50	37	39
Chloride (total)	10000	13000	10000	12000	12000	13000	13000	13000
Cyanide, total	0.013	0.002	0.002	0.009	0.002	0.002	0.003	0.004
Hardness	3200	4100	4300	4900	4150	4200	3800	4300
Nitrate + nitrite as nitrogen	0.27	0.28	0.68	0.48	0.295	0.3	0.4	0.32
Nitrogen (Kjeldahl)	1.8	0.9	0.1	0.1	1.05	0.93	1	0.89
Particulate Organic Carbon (POC)	3.32	1	1	1	2.385	3.08	2.53	1
Phosphorus	0.335	0.222	0.128	0.138	0.165	0.187	0.174	0.17
Sulfate	1500	1700	1200	1400	1350	1400	1600	1700
Suspended Sediment - coarse fraction	0.7475	0.5537	0	0	5.73055	2.8299	2.18	4.04
Suspended Sediment - fine fraction	20.18	7.57	3.27	6.37	7.24	12.45	5.27	5.69
Total organic carbon	7.8	6.4	0.03	0.03	0.15	0.04	0.4	0.29
Total suspended solids	34	36	9.8	16	17	17	12	9.4
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	10	10	1	1	N/A	N/A	1	1
Nitrate + nitrite as nitrogen - Dissolved	0.37	0.44	0.69	0.46	0.3	0.4	0.42	0.34
Nitrogen (Kjeldahl) - Dissolved	0.52	0.57	0.9	0.06	0.365	0.64	0.71	0.75
Phosphorus - Dissolved	0.133	0.16	0.152	0.133	0.06	0.075	0.058	0.087
Total dissolved solids - Dissolved	19000	23000	18000	21000	22000	23000	20000	22000
Metals (µg/L)								
Aluminum	37	139	23	46	102.5	439	630	110

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.317 NC068SW_20120603 NC068SW-A-20120603 6/3/2012 2.5 ft 22 ft N	Newtown Creek 2.317 NC068SW_20120603 NC068SW-C-20120603 6/3/2012 17 ft 22 ft N	Newtown Creek 2.45 NC070_20120206 NC070SW-A-20120206 2/6/2012 3.2 ft 18 ft N	Newtown Creek 2.45 NC070_20120206 NC070SW-C-20120206 2/6/2012 16.5 ft 18 ft N	Newtown Creek 2.44 NC070_20120324 NC070SW-A-20120325 3/25/2012 3 ft 23 ft N	Newtown Creek 2.44 NC070_20120324 NC070SW-C-20120325 3/25/2012 17 ft 23 ft N	Newtown Creek 2.437 NC070_20120405 NC070SW-A-20120405 4/5/2012 1 ft 18 ft N	Newtown Creek 2.437 NC070_20120405 NC070SW-C-20120405 4/5/2012 15.5 ft 18 ft N
Antimony	1	1	0.1	0.1	1.1	1.1	1.1	1.1
Arsenic	1.36	1.56	1.13	0.8	0.805	1.79	1.11	1.34
Barium	20.7	16.9	30.6	16.9	20.25	38.3	26.4	19.1
Beryllium	1	1	0.1	0.1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.1	0.1	0.5	1.1	0.5	0.5
Calcium	196000	249000	233000	256000	273000	278000	259000	288000
Chromium	2	2	0.6	0.5	2.4	9.4	1.7	1.5
Cobalt	1	1	0.3	0.1	1	1	1	1
Copper	3.5	14.7	2.5	2.2	15.65	90.2	3.3	14.5
Iron	322	588	219	173	330.5	1180	444	478
Lead	2	3.3	0.6	0.7	4	16.4	1.7	3
Magnesium	657000	842000	913000	1040000	843500	859000	765000	861000
Manganese	77.1	68.9	74.9	33.9	65.5	116.5	89.8	72.1
Mercury	0.00428	0.00453	0.00141	0.00182	0.01408	0.102	0.00311	0.00529
Nickel	1.8	3.4	2.9	1.4	3.5	16.7	3.6	4.2
Potassium	183000	243000	230000	264000	291000	298000	188000	208000
Selenium	3.37	1.3	0.728	0.876	1.16	1.16	1.16	1.16
Silver	1	1	0.1	0.1	0.8	0.8	0.8	0.8
Sodium	5570000	7150000	5860000	6710000	7425000	7530000	6680000	7510000
Thallium	0.3	0.3	0.03	0.03	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.7	0.7	0.7	0.9	0.8
Vanadium	1.1	1.7	1.1	1.3	1.4	1.4	1.4	1.4
Zinc	12	12	23.2	14.2	20.35	62	19.2	29.3
Metals, Dissolved (µg/L)								
Aluminum	20	20	19	2	20	20	20	20
Antimony	1	1	0.8	0.1	7.35	7.3	1.1	1.1
Arsenic	1.09	1.19	1.25	0.87	0.625	0.75	0.86	0.88
Barium	19.6	15	28.5	15.4	16.55	14.8	24.1	18
Beryllium	1	1	0.1	0.1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.1	0.1	0.5	0.5	0.5	0.5
Calcium	205000	251000	227000	261000	268000	275000	230000	256000
Chromium	2	2	0.2	0.4	1.5	1.5	1.5	1.5
Cobalt	1	1	0.3	0.2	1	1	1	1
Copper	1.6	1.3	1.9	1	1.1	1.1	2.1	1.2
Iron	130	130	204	70	125	125	125	125
Lead	2	2	0.6	0.2	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile	Newtown Creek 2.317	Newtown Creek 2.317	Newtown Creek 2.45	Newtown Creek 2.45	Newtown Creek 2.44	Newtown Creek 2.44	Newtown Creek 2.437	Newtown Creek 2.437
Location ID	NC068SW_20120603	NC068SW_20120603	NC070_20120206	NC070_20120206	NC070_20120324	NC070_20120324	NC070_20120405	NC070_20120405
Sample ID	NC068SW-A-20120603	NC068SW-C-20120603	NC070SW-A-20120206	NC070SW-C-20120206	NC070SW-A-20120325	NC070SW-C-20120325	NC070SW-A-20120405	NC070SW-C-20120405
Sample Date	6/3/2012	6/3/2012	2/6/2012	2/6/2012	3/25/2012	3/25/2012	4/5/2012	4/5/2012
Sample Depth	2.5 ft	17 ft	3.2 ft	16.5 ft	3 ft	17 ft	1 ft	15.5 ft
Water Column Depth	22 ft	22 ft	18 ft	18 ft	23 ft	23 ft	18 ft	18 ft
Sample Type	N	N	N	N	N	N	N	N
Magnesium	690000	848000	868000	1060000	808500	834000	709000	806000
Manganese	66.1	65.2	69.8	32	52.75	47.3	84.3	71.9
Mercury	0.00037	0.00015	0.00176	0.00015	0.000465	0.0007	0.00015	0.00015
Nickel	1.6	1.2	2.7	1.1	1.1	0.8	0.8	0.8
Potassium	193000	242000	235000	284000	286500	296000	239000	268000
Selenium	1.93	1.27	0.922	0.614	1.16	1.16	1.16	1.16
Silver	1	1	0.1	0.1	0.8	0.8	0.8	0.8
Sodium	5870000	7190000	5620000	6860000	7010000	7250000	6240000	7050000
Thallium	0.3	0.3	0.03	0.03	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Vanadium	1.4	2.1	1.1	1.1	1.4	1.4	1.4	1.4
Zinc	12	12	20.5	11.9	11.9	11.9	20.2	19.1
Organometallic Compounds (µg/L)								
Methyl mercury	0.000134	0.000092	0.000101	0.0001	0.00002	0.00005	0.000029	0.00002
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	28.99	25.86	26.06	10	10	10	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	1.2	1.2	8.38	8.235	1.2	9.584	7.975	8.349
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.1641	0.29318	0.21328	0.07814	0.120205	0.62527	0.09314	0.26769
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.2297	0.62371	0.69043	0.19626	0.24457	1.48726	0.18385	0.65984
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.04	0.045	0.04	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.15	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.15	0.2	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.1	0.1	0.15	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.317 NC068SW_20120603 NC068SW-A-20120603 6/3/2012 2.5 ft 22 ft N	Newtown Creek 2.317 NC068SW_20120603 NC068SW-C-20120603 6/3/2012 17 ft 22 ft N	Newtown Creek 2.45 NC070_20120206 NC070SW-A-20120206 2/6/2012 3.2 ft 18 ft N	Newtown Creek 2.45 NC070_20120206 NC070SW-C-20120206 2/6/2012 16.5 ft 18 ft N	Newtown Creek 2.44 NC070_20120324 NC070SW-A-20120325 3/25/2012 3 ft 23 ft N	Newtown Creek 2.44 NC070_20120324 NC070SW-C-20120325 3/25/2012 17 ft 23 ft N	Newtown Creek 2.437 NC070_20120405 NC070SW-A-20120405 4/5/2012 1 ft 18 ft N	Newtown Creek 2.437 NC070_20120405 NC070SW-C-20120405 4/5/2012 15.5 ft 18 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)	0.1	0.1	0.1	0.1	0.15	0.1	0.1	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)	0.3	0.3	0.3	0.3	0.35	0.3	0.3	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane	0.1	0.1	0.1	0.1	0.15	0.2	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	1	1	1	1
n-Pentadecane (C15)	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)	1	1	1	1	1	1	1	1
n-Tritriacontane (C33)	1	0.1	0.1	0.1	0.15	0.2	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.089	0.03628	0.03905	0.03794	0.1846	0.09	0.18	0.089
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	49	49	49	49	49	49	50
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	0.00398	0.04323	0.00917	0.76825	0.044063	0.132397
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.014	0.0028	0.0028	0.0028	0.0028	0.0385	0.028	0.014
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	3.53742	3.1688	8.30554	91.9873	8.86782	22.5116
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.5383	0.1833	0.0563	0.006	0.2248	0.4094	0.2413	0.2303

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.442 NC070_20120509 NC070SW-A-20120509 5/9/2012 1 ft 19 ft N	Newtown Creek 2.442 NC070_20120509 NC070SW-C-20120509 5/9/2012 18 ft 19 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-A-20120606 6/6/2012 2 ft 21 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-C-20120606 6/6/2012 20 ft 21 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-A-20120210 2/10/2012 3.2 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-C-20120210 2/10/2012 17.5 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-A-20120323 3/23/2012 1 ft 21 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-C-20120323 3/23/2012 18 ft 21 ft N
Water Quality Measurements								
Conductivity (µs/cm)	27535	28527	29913	31074	12900	13365	26720	25617
Dissolved Oxygen (mg/L)	6.4	6.22	10.59	3.8	8.49	9.48	16.42	10.26
pH (su)	7.34	7.35	7.87	7.15	7.57	7.71	8.48	8.06
Salinity (ppth)	21.95	22.86	21.19	22.94	12.01	12.63	22.13	22.48
Temperature (deg C)	14.35	13.95	19.08	18.86	5.93	5.53	12.48	10.15
Turbidity (NTU)	5	2.5	3	3.3	3.4	3.2	4.8	4.7
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	20000	190	2400	1700	10	10	10	10
Coliforms, Total	20000	660	6200	2500	130	20	60	10
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	100	100	100	98	100	100	110	110
Ammonia as nitrogen	0.644	0.492	0.017	0.358	0.558	0.527	0.017	0.296
Biochemical Oxygen Demand (BOD-30)	32.7	7.43	13.9	10.4	4.35	4.98	22.4	16.6
Biochemical Oxygen Demand (BOD-5)	10.4	2.27	5.07	2.12	2.06	2	7.96	5.69
Bromide	36	34	25	37	30	36	35	44
Chloride (total)	12000	12000	14000	12000	12000	12000	12000	12000
Cyanide, total	0.003	0.002	0.002	0.002	0.002	0.003	0.003	0.002
Hardness	4300	4600	3700	4000	4500	4600	4100	4200
Nitrate + nitrite as nitrogen	0.4	0.43	0.34	0.36	0.54	0.5	0.24	0.24
Nitrogen (Kjeldahl)	2.9	0.92	0.94	0.74	0.9	0.77	0.96	1.1
Particulate Organic Carbon (POC)	5.48	1	2.52	1	1	1	2.01	2.07
Phosphorus	0.368	0.205	0.206	0.203	0.157	0.148	0.117	0.167
Sulfate	1400	1500	1800	1600	1400	1600	1300	1400
Suspended Sediment - coarse fraction	4.37	0	0.5576	1.329	0	3.3792	0	0
Suspended Sediment - fine fraction	11.59	4.79	5.39	2.85	4.79	12.6	12.36	10.47
Total organic carbon	2.3	1.3	2.6	1.3	0.03	0.03	0.41	0.36
Total suspended solids	30	11	30	26	17	14	18	16
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	4	4	10	10	1	1	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.42	0.43	0.69	0.4	0.54	0.49	0.24	0.25
Nitrogen (Kjeldahl) - Dissolved	1.2	0.7	0.06	0.06	0.88	0.72	0.22	0.46
Phosphorus - Dissolved	0.167	0.144	0.107	0.121	0.086	0.104	0.015	0.074
Total dissolved solids - Dissolved	21000	23000	22000	24000	20000	22000	22000	22000
Metals (µg/L)								
Aluminum	44	54	20	76	27	44	39	70

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.442 NC070_20120509 NC070SW-A-20120509 5/9/2012 1 ft 19 ft N	Newtown Creek 2.442 NC070_20120509 NC070SW-C-20120509 5/9/2012 18 ft 19 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-A-20120606 6/6/2012 2 ft 21 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-C-20120606 6/6/2012 20 ft 21 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-A-20120210 2/10/2012 3.2 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-C-20120210 2/10/2012 17.5 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-A-20120323 3/23/2012 1 ft 21 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-C-20120323 3/23/2012 18 ft 21 ft N
Antimony	1.1	1.1	1	1	5.5	4.4	1.1	1.1
Arsenic	1.36	1.39	1.05	1.16	1.28	1.16	1.03	1.26
Barium	22.9	18.5	20.2	17.5	19.4	16.4	21.5	20
Beryllium	1.2	1.2	1	1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	224000	241000	238000	261000	245000	247000	271000	275000
Chromium	1.5	1.5	2	2	1.5	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	3.1	2.7	2.9	2.6	2.8	2.6	1.9	3.1
Iron	317	283	196	301	244	212	252	405
Lead	1.7	1.7	2	2	1.7	1.7	1.7	1.7
Magnesium	919000	968000	758000	809000	942000	967000	833000	849000
Manganese	74.5	69.1	76.3	69.1	56.7	42.3	77.3	71.1
Mercury	0.00564	0.00453	0.00193	0.00343	0.00298	0.00271	0.00487	0.00465
Nickel	2	1.8	1	1.3	2.5	1.8	1.8	2.7
Potassium	296000	281000	219000	244000	416000	425000	288000	293000
Selenium	1.21	1.21	1.16	1.16	0.581	0.581	1.16	1.16
Silver	0.8	0.8	1	1	0.8	0.8	0.8	0.8
Sodium	6470000	6790000	6530000	6970000	6220000	6350000	7290000	7490000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Vanadium	1.4	1.4	1	1.9	1.4	1.4	1.4	1.4
Zinc	16.6	11.9	12	12	21.6	17.2	12.5	12
Metals, Dissolved (µg/L)								
Aluminum	20	20	79	20	20	20	20	20
Antimony	1.1	1.1	1	1	1.1	1.1	13.9	9.3
Arsenic	1	1.03	1.05	1.19	0.92	0.92	0.5	0.54
Barium	18.9	19.1	21.6	14.7	19.9	17.1	19.8	16.5
Beryllium	1.2	1.2	1	1	1.2	1.2	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	236000	247000	240000	249000	232000	256000	280000	266000
Chromium	1.5	1.5	2	2	1.7	1.5	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	1.6	1.1	1.5	1.3	1.1	1.1	1.1	1.1
Iron	140	198	130	130	125	125	125	125
Lead	1.7	1.7	2	2	1.7	1.7	1.7	1.7

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.442 NC070_20120509 NC070SW-A-20120509 5/9/2012 1 ft 19 ft N	Newtown Creek 2.442 NC070_20120509 NC070SW-C-20120509 5/9/2012 18 ft 19 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-A-20120606 6/6/2012 2 ft 21 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-C-20120606 6/6/2012 20 ft 21 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-A-20120210 2/10/2012 3.2 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-C-20120210 2/10/2012 17.5 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-A-20120323 3/23/2012 1 ft 21 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-C-20120323 3/23/2012 18 ft 21 ft N
Magnesium	922000	986000	750000	833000	888000	979000	841000	831000
Manganese	76.4	72.3	79	72.2	57.1	45.5	63.8	61
Mercury	0.00109	0.00092	0.00041	0.00035	0.00037	0.0002	0.00106	0.00049
Nickel	1	0.8	1.1	1	0.8	0.8	2	1.5
Potassium	269000	278000	221000	227000	391000	434000	294000	287000
Selenium	1.21	1.21	1.16	1.16	0.581	0.581	1.16	1.16
Silver	0.8	0.8	1	1	0.8	0.8	0.8	0.8
Sodium	6530000	6970000	6420000	7200000	5820000	6450000	7240000	7240000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Vanadium	1.4	1.4	1.6	1	1.4	1.4	1.4	1.4
Zinc	11.9	11.9	12	12	15.2	11.9	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.000426	0.00002	0.000061	0.000026	0.000101	0.000101	0.000019	0.000019
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	26.77	25.76	27.56	26.16	25.98	10	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	10.175	9.654	8.42	1.2	8.278	7.916	1.2	8.43
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.19092	0.13653	0.13272	0.1513	0.27022	0.21646	0.19121	0.17435
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.47306	0.30441	0.48122	0.30655	0.66794	0.5273	0.41131	0.37542
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	8	1	0.1	0.1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

	Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.442 NC070_20120509 NC070SW-A-20120509 5/9/2012 1 ft 19 ft N	Newtown Creek 2.442 NC070_20120509 NC070SW-C-20120509 5/9/2012 18 ft 19 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-A-20120606 6/6/2012 2 ft 21 ft N	Newtown Creek 2.445 NC070SW_20120606 NC070SW-C-20120606 6/6/2012 20 ft 21 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-A-20120210 2/10/2012 3.2 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120210 NC079SW-C-20120210 2/10/2012 17.5 ft 21.2 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-A-20120323 3/23/2012 1 ft 21 ft N	Newtown Creek 2.82 NC079_20120323 NC079SW-C-20120323 3/23/2012 18 ft 21 ft N
n-Hexadecane (C16)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)		1	1	1	1	1	1	1	1
n-Pentadecane (C15)		0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2
n-Pentatriacontane (C35)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)		1	1	1	1	1	1	1	1
n-Tritriacontane (C33)		0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Undecane (C11)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)									
Total Pesticides (U = MDL)		0.18222	0.03684	0.3634	0.03686	0.03803	0.018	0.18016	0.18518
Herbicides (µg/L)									
Total Herbicides (U = MDL)		49	49	49	49	49	49	50	51
Dioxin Furans (ng/L)									
Total DFs (U = MDL)		0.010433	0.00597	0.0114	0.00356	0.00552	0.044191	0.13939	0.106404
PCB Aroclors (µg/L)									
Total PCB Aroclor (U = MDL)		0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0029
PCB Congeners (ng/L)									
Total PCB Congener (U = MDL)		10.0421	5.89106	8.29084	8.01359	6.97349	3.99485	12.3581	11.6616
Total Petroleum Hydrocarbons (mg/L)									
Total TPH (U = MDL)		0.3045	0.006	0.3153	0.1303	0.1603	0.1073	0.3463	0.2443

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.826 NC079_20120402 NC079SW-A-20120402 4/2/2012 2 ft 21 ft N	Newtown Creek 2.826 NC079_20120402 NC079SW-C-20120402 4/2/2012 18 ft 21 ft N	Newtown Creek 2.82 NC079_20120509 NC079SW-A-20120509 5/9/2012 1.5 ft 24 ft N	Newtown Creek 2.82 NC079_20120509 NC079SW-C-20120509 5/9/2012 23 ft 24 ft N	Newtown Creek 2.826 NC079SW_20120607 NC079SW-A-20120607 6/7/2012 2 ft 21 ft N	Newtown Creek 2.826 NC079SW_20120607 NC079SW-C-20120607 6/7/2012 21 ft 21 ft N	Whale Creek 0.940 WC001_20120210 WC001SW-A-20120210 2/10/2012 3.2 ft 25.1 ft N	Whale Creek 0.940 WC001_20120210 WC001SW-C-20120210 2/10/2012 22.5 ft 25.1 ft N
Water Quality Measurements								
Conductivity (µs/cm)	22778	25751	27952	28528	30085	36010	13500	14232
Dissolved Oxygen (mg/L)	8.31	4.3	5.68	5.43	11.43	2.42	10.53	11.05
pH (su)	7.8	7.46	7.29	7.29	7.8	7.03	7.87	7.94
Salinity (ppth)	19.76	22.56	22.22	22.89	21.16	22.79	12.82	13.65
Temperature (deg C)	10.19	10.25	14.21	13.91	19.44	18.8	5.39	5.21
Turbidity (NTU)	6.5	5.6	3.4	1.4	3.9	2.8	4.3	5.7
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	860	160	8000	230	7100	1000	10	10
Coliforms, Total	18000	9000	20000	1700	28000	2100	10	30
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	110	100	100	100	100	97	100	95
Ammonia as nitrogen	0.441	0.634	0.461	0.493	0.017	0.338	0.455	0.463
Biochemical Oxygen Demand (BOD-30)	8.61	5.87	19.5	5.04	16.1	9.84	4.32	3.93
Biochemical Oxygen Demand (BOD-5)	5.3	2.29	8.58	2	5.07	2	2	2
Bromide	31	38	42	29	93	39	33	39
Chloride (total)	12000	14000	12000	12000	12000	13000	12000	14000
Cyanide, total	0.004	0.003	0.002	0.002	0.002	0.002	0.006	0.002
Hardness	3700	4000	4500	4800	3600	4000	4700	4900
Nitrate + nitrite as nitrogen	0.43	0.26	0.38	0.41	0.19	0.32	0.52	0.46
Nitrogen (Kjeldahl)	1.2	0.95	2.1	1	1.3	0.83	0.78	0.72
Particulate Organic Carbon (POC)	1.91	1	1	1	3.91	1	1	1
Phosphorus	0.171	0.191	0.31	0.184	0.393	0.245	0.121	0.141
Sulfate	1600	1700	1500	1300	1600	1700	1500	1700
Suspended Sediment - coarse fraction	1.16	2.99	1.16	1.47	2.2433	1.3135	5.4546	0
Suspended Sediment - fine fraction	6.56	5.42	9.25	3.13	4.11	4.5	8.28	9.04
Total organic carbon	0.51	0.28	1.8	1.2	2.4	1.8	0.03	0.03
Total suspended solids	10	8.2	19	7.7	33	31	16	20
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	N/A	N/A	4	4	10	10	1	1
Nitrate + nitrite as nitrogen - Dissolved	0.45	0.26	0.4	0.4	0.22	0.32	0.55	0.46
Nitrogen (Kjeldahl) - Dissolved	0.78	0.76	0.88	0.76	0.06	0.06	0.7	0.65
Phosphorus - Dissolved	0.065	0.092	0.155	0.124	0.095	0.133	0.11	0.136
Total dissolved solids - Dissolved	20000	22000	22000	24000	22000	23000	22000	23000
Metals (µg/L)								
Aluminum	59	35	26	29	20	60	42	89

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.826 NC079_20120402 NC079SW-A-20120402 4/2/2012 2 ft 21 ft N	Newtown Creek 2.826 NC079_20120402 NC079SW-C-20120402 4/2/2012 18 ft 21 ft N	Newtown Creek 2.82 NC079_20120509 NC079SW-A-20120509 5/9/2012 1.5 ft 24 ft N	Newtown Creek 2.82 NC079_20120509 NC079SW-C-20120509 5/9/2012 23 ft 24 ft N	Newtown Creek 2.826 NC079SW_20120607 NC079SW-A-20120607 6/7/2012 2 ft 21 ft N	Newtown Creek 2.826 NC079SW_20120607 NC079SW-C-20120607 6/7/2012 21 ft 21 ft N	Whale Creek 0.940 WC001_20120210 WC001SW-A-20120210 2/10/2012 3.2 ft 25.1 ft N	Whale Creek 0.940 WC001_20120210 WC001SW-C-20120210 2/10/2012 22.5 ft 25.1 ft N
Antimony	1.1	1.7	1.1	1.1	1	1	4.7	8.9
Arsenic	1.11	1.26	1.49	1.54	1.12	1.17	1.2	1.12
Barium	26.5	20.1	20.4	17.8	23.1	15.9	17.5	13.6
Beryllium	1.2	1.2	1.2	1.2	1	1	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	259000	271000	248000	262000	217000	254000	258000	264000
Chromium	1.5	1.5	1.5	1.5	2	2	1.5	1.5
Cobalt	1	1	1	1	1	1	1	1
Copper	6.2	4.8	2.6	3.1	2.4	2.2	2.2	2.4
Iron	384	653	305	365	256	360	200	228
Lead	2.6	1.8	1.7	1.7	2	2	1.7	1.7
Magnesium	746000	803000	954000	1010000	745000	831000	994000	1030000
Manganese	88.3	82.7	76.4	71.8	73.6	75	46.8	27.1
Mercury	0.0104	0.00632	0.00495	0.00303	0.00201	0.00169	0.00265	0.00361
Nickel	3	2.5	2	2	1.8	1	0.9	0.8
Potassium	235000	257000	262000	281000	193000	237000	439000	456000
Selenium	1.16	1.16	1.21	1.21	1.16	1.16	0.701	0.581
Silver	0.8	0.8	0.8	0.8	1	1	0.8	0.8
Sodium	6370000	6880000	6630000	6990000	6540000	7170000	6520000	6820000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	2.1	1.7	0.6	0.6	0.6	0.6	0.7	0.7
Vanadium	1.4	1.4	1.4	1.4	1.6	1.9	1.4	1.4
Zinc	17.9	13.2	11.9	11.9	12	12	13.6	13
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	37	20	24	28
Antimony	1.1	1.1	1.1	1.1	1	1	1.1	1.1
Arsenic	0.84	0.99	1	1.05	1.13	1.25	0.97	0.84
Barium	23.5	18.5	17.5	18.2	21.3	16.2	16.9	13.8
Beryllium	1.2	1.2	1.2	1.2	1	1	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Calcium	241000	261000	238000	262000	226000	230000	238000	269000
Chromium	1.5	1.5	1.5	1.5	2	2	1.7	2.1
Cobalt	1	1	1	1	1	1	1	1
Copper	2.4	1.1	1.1	1.1	1.3	1.4	1.1	1.1
Iron	125	128	133	234	130	130	125	125
Lead	1.7	1.7	1.7	1.7	2	2	1.7	1.7

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Newtown Creek 2.826 NC079_20120402 NC079SW-A-20120402 4/2/2012 2 ft 21 ft N	Newtown Creek 2.826 NC079_20120402 NC079SW-C-20120402 4/2/2012 18 ft 21 ft N	Newtown Creek 2.82 NC079_20120509 NC079SW-A-20120509 5/9/2012 1.5 ft 24 ft N	Newtown Creek 2.82 NC079_20120509 NC079SW-C-20120509 5/9/2012 23 ft 24 ft N	Newtown Creek 2.826 NC079SW_20120607 NC079SW-A-20120607 6/7/2012 2 ft 21 ft N	Newtown Creek 2.826 NC079SW_20120607 NC079SW-C-20120607 6/7/2012 21 ft 21 ft N	Whale Creek 0.940 WC001_20120210 WC001SW-A-20120210 2/10/2012 3.2 ft 25.1 ft N	Whale Creek 0.940 WC001_20120210 WC001SW-C-20120210 2/10/2012 22.5 ft 25.1 ft N
Magnesium	790000	861000	939000	993000	763000	772000	904000	1040000
Manganese	82.5	79.9	73.8	65.6	73.5	70.5	43.2	19.9
Mercury	0.0024	0.00507	0.00072	0.00121	0.00031	0.0002	0.00023	0.00026
Nickel	2.6	2	2.5	2.1	1.1	1.8	0.8	0.8
Potassium	244000	267000	260000	274000	203000	211000	402000	466000
Selenium	1.35	1.16	1.21	1.21	1.16	1.16	0.581	0.581
Silver	0.8	0.8	0.8	0.8	1	1	0.8	0.8
Sodium	6630000	7210000	6610000	7010000	6650000	6720000	5950000	6840000
Thallium	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Tin	2.3	1.7	0.6	0.6	0.6	0.6	0.7	0.7
Vanadium	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.4
Zinc	11.9	11.9	11.9	11.9	12	12	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.000033	0.00002	0.00012	0.00002	0.000091	0.000029	0.000102	0.000098
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	26.06	10	27.59	26.16	27.46	27.66	10	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.001	1.2	8.935	9.47	1.2	1.2	8.195	7.906
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.21161	0.15708	0.14459	0.12537	0.12379	0.13957	0.18527	0.08453
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.7694	0.39646	0.42002	0.29214	0.39753	0.2977	0.48116	0.13443
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Docosane (C22)	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04
n-Dodecane (C12)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Dotriacontane (C32)	0.1	0.1	7	1	0.1	0.1	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Heptadecane (C17)	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

	Tributary River Mile	Newtown Creek 2.826	Newtown Creek 2.826	Newtown Creek 2.82	Newtown Creek 2.82	Newtown Creek 2.826	Newtown Creek 2.826	Whale Creek 0.940	Whale Creek 0.940
	Location ID	NC079_20120402	NC079_20120402	NC079_20120509	NC079_20120509	NC079SW_20120607	NC079SW_20120607	WC001_20120210	WC001_20120210
	Sample ID	NC079SW-A-20120402	NC079SW-C-20120402	NC079SW-A-20120509	NC079SW-C-20120509	NC079SW-A-20120607	NC079SW-C-20120607	WC001SW-A-20120210	WC001SW-C-20120210
	Sample Date	4/2/2012	4/2/2012	5/9/2012	5/9/2012	6/7/2012	6/7/2012	2/10/2012	2/10/2012
	Sample Depth	2 ft	18 ft	1.5 ft	23 ft	2 ft	21 ft	3.2 ft	22.5 ft
	Water Column Depth	21 ft	21 ft	24 ft	24 ft	21 ft	21 ft	25.1 ft	25.1 ft
	Sample Type	N	N	N	N	N	N	N	N
n-Hexadecane (C16)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Hexatriacontane (C36)		0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonacosane (C29)		0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Nonadecane (C19)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Nonane (C9)		0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
n-Nonatriacontane (C39)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octacosane (C28)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Octadecane (C18)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Octatriacontane (C38)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Norpristane		0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
n-Pentacosane (C25)		1	1	1	1	1	1	1	1
n-Pentadecane (C15)		0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1
n-Pentatriacontane (C35)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracontane (C40)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Tetracosane (C24)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetradecane (C14)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tetratriacontane (C34)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
n-Triacontane (C30)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tricosane (C23)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
n-Tridecane (C13)		1	1	1	1	1	1	1	1
n-Tritriacontane (C33)		0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
n-Undecane (C11)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pesticides (µg/L)									
Total Pesticides (U = MDL)		0.3685	0.03878	0.03666	0.03856	0.18	0.03694	0.035	0.035
Herbicides (µg/L)									
Total Herbicides (U = MDL)		49	49	50	49	49	49	49	49
Dioxin Furans (ng/L)									
Total DFs (U = MDL)		0.087358	0.026842	0.0107	0.0017	0.00883	0.00917	N/A	N/A
PCB Aroclors (µg/L)									
Total PCB Aroclor (U = MDL)		0.028	0.0028	0.1134	0.0028	0.0028	0.0028	0.0028	0.0028
PCB Congeners (ng/L)									
Total PCB Congener (U = MDL)		8.62466	6.93682	8.24571	6.60685	4.7699	7.02785	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)									
Total TPH (U = MDL)		0.3904	0.1763	0.2723	0.006	0.2383	0.1173	0.0623	0.0563

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Whale Creek 0.930 WC001_20120319 WC001SW-A-20120319 3/19/2012 1.5 ft 13 ft N	Whale Creek 0.930 WC001_20120319 WC001SW-C-20120319 3/19/2012 16.5 ft 13 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-A-20120403 4/3/2012 3 - 3 ft 24 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-C-20120403 4/3/2012 20 ft 24 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-A-20120408 4/8/2012 3 ft 26 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-C-20120408 4/8/2012 25 ft 26 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-A-20120507 5/7/2012 2 ft 27 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-C-20120507 5/7/2012 24 ft 27 ft N
Water Quality Measurements								
Conductivity (µs/cm)	25015	24511	25428	25934	27027	27346	28295	28775
Dissolved Oxygen (mg/L)	15.71	11.61	8.72	8.22	9.56	9.11	6.24	6.75
pH (su)	8.45	8.16	7.81	7.8	7.94	7.95	7.38	7.48
Salinity (ppth)	21.88	22.4	21.98	23.01	23.26	24.25	22.77	23.58
Temperature (deg C)	9.85	8.54	10.56	9.84	11.04	9.99	13.68	13.11
Turbidity (NTU)	4	7.9	4.8	11.2	5.3	6.6	1.8	7.2
Conventional Parameters (cfu/100mL)								
Coliforms, Fecal	20	10	N/A	N/A	10	10	190	120
Coliforms, Total	30	40	N/A	N/A	30	100	440	460
Conventional Parameters (mg/L)								
Alkalinity, total as calcium carbonate (CaCO3)	100	100	100	99	N/A	N/A	99	98
Ammonia as nitrogen	0.148	0.451	N/A	N/A	0.295	0.452	0.531	0.554
Biochemical Oxygen Demand (BOD-30)	15.4	16	N/A	N/A	5.74	4.48	5.24	5.66
Biochemical Oxygen Demand (BOD-5)	5.57	2.98	N/A	N/A	2.15	2	2	2
Bromide	32	32	35	38	N/A	N/A	39	49
Chloride (total)	12000	13000	13000	14000	N/A	N/A	12000	12000
Cyanide, total	0.0048	0.003	0.002	0.002	N/A	N/A	0.002	0.002
Hardness	4100	4300	3900	4200	N/A	N/A	4200	4200
Nitrate + nitrite as nitrogen	0.19	0.29	N/A	N/A	0.32	0.26	0.44	0.42
Nitrogen (Kjeldahl)	0.61	0.97	N/A	N/A	0.74	0.9	1.2	1.2
Particulate Organic Carbon (POC)	2	1	1.15	1.84	N/A	N/A	1	2.19
Phosphorus	0.14	0.165	N/A	N/A	0.122	0.129	0.182	0.362
Sulfate	1400	1400	1600	1700	N/A	N/A	1600	1500
Suspended Sediment - coarse fraction	0	3.01	2.2	4.02	N/A	N/A	1.47	46.22
Suspended Sediment - fine fraction	8.24	12.4	5.88	26.5	N/A	N/A	7.54	117.53
Total organic carbon	0.31	0.26	0.3	0.23	N/A	N/A	0.4	0.37
Total suspended solids	28	17	8.9	35	N/A	N/A	9.5	100
Conventional Parameters, Dissolved (mg/L)								
Dissolved organic carbon - Dissolved	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrate + nitrite as nitrogen - Dissolved	0.2	0.28	N/A	N/A	0.33	0.25	0.43	0.44
Nitrogen (Kjeldahl) - Dissolved	0.37	0.58	N/A	N/A	0.06	0.62	0.06	0.06
Phosphorus - Dissolved	0.036	0.074	N/A	N/A	0.079	0.085	0.144	0.129
Total dissolved solids - Dissolved	22000	22000	22000	23000	N/A	N/A	23000	23000
Metals (µg/L)								
Aluminum	96	343	55	847	N/A	N/A	79	1680

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Whale Creek 0.930 WC001_20120319 WC001SW-A-20120319 3/19/2012 1.5 ft 13 ft N	Whale Creek 0.930 WC001_20120319 WC001SW-C-20120319 3/19/2012 16.5 ft 13 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-A-20120403 4/3/2012 3 - 3 ft 24 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-C-20120403 4/3/2012 20 ft 24 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-A-20120408 4/8/2012 3 ft 26 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-C-20120408 4/8/2012 25 ft 26 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-A-20120507 5/7/2012 2 ft 27 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-C-20120507 5/7/2012 24 ft 27 ft N
Antimony	7.5	11.7	1.1	1.1	N/A	N/A	1.1	1.1
Arsenic	0.6	0.76	1.05	1.19	N/A	N/A	0.82	1.32
Barium	18.9	16.7	21.5	19.3	N/A	N/A	18.2	21.7
Beryllium	1.2	1.2	1.2	1.2	N/A	N/A	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	N/A	N/A	0.5	0.5
Calcium	273000	281000	268000	289000	N/A	N/A	281000	280000
Chromium	1.5	2.1	1.5	4.1	N/A	N/A	1.5	8.1
Cobalt	1	1	1	1	N/A	N/A	1	1.1
Copper	2	3.3	3.4	9	N/A	N/A	2.4	17.2
Iron	237	723	286	1770	N/A	N/A	264	3470
Lead	1.7	1.9	1.7	5.1	N/A	N/A	1.7	15
Magnesium	842000	867000	792000	848000	N/A	N/A	858000	842000
Manganese	57	53.9	78	78.9	N/A	N/A	71.6	112
Mercury	0.00331	0.00897	0.00452	0.0341	N/A	N/A	0.00295	0.0953
Nickel	1.1	1.1	2.1	3	N/A	N/A	1.3	4.8
Potassium	293000	299000	257000	276000	N/A	N/A	192000	189000
Selenium	1.16	1.16	1.16	1.16	N/A	N/A	1.21	1.21
Silver	0.8	0.8	0.8	0.8	N/A	N/A	0.8	0.8
Sodium	7380000	7560000	6810000	7280000	N/A	N/A	7140000	7050000
Thallium	0.3	0.3	0.3	0.3	N/A	N/A	0.3	0.3
Tin	1.4	0.7	0.7	0.9	N/A	N/A	0.6	0.6
Vanadium	1.4	1.4	1.4	1.7	N/A	N/A	1.4	6.2
Zinc	11.9	11.9	12.5	20.7	N/A	N/A	11.9	33.6
Metals, Dissolved (µg/L)								
Aluminum	20	20	20	20	N/A	N/A	20	20
Antimony	13.7	60.5	1.1	1.1	N/A	N/A	2.8	2.7
Arsenic	0.75	0.84	0.92	0.88	N/A	N/A	0.81	1.29
Barium	17.5	15.8	17.3	15.1	N/A	N/A	16.8	19
Beryllium	1.2	1.2	1.2	1.2	N/A	N/A	1.2	1.2
Cadmium	0.5	0.5	0.5	0.5	N/A	N/A	0.5	0.5
Calcium	269000	276000	258000	263000	N/A	N/A	290000	291000
Chromium	1.6	1.5	1.5	1.5	N/A	N/A	1.5	1.5
Cobalt	1	1	1	1	N/A	N/A	1	1
Copper	1.4	1.1	1.2	1.1	N/A	N/A	1.1	1.1
Iron	125	125	125	125	N/A	N/A	179	191
Lead	1.7	1.7	1.7	1.7	N/A	N/A	1.7	1.7

**Table A3-2
Analytical Surface Water Results**

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Whale Creek 0.930 WC001_20120319 WC001SW-A-20120319 3/19/2012 1.5 ft 13 ft N	Whale Creek 0.930 WC001_20120319 WC001SW-C-20120319 3/19/2012 16.5 ft 13 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-A-20120403 4/3/2012 3 - 3 ft 24 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-C-20120403 4/3/2012 20 ft 24 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-A-20120408 4/8/2012 3 ft 26 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-C-20120408 4/8/2012 25 ft 26 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-A-20120507 5/7/2012 2 ft 27 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-C-20120507 5/7/2012 24 ft 27 ft N
Magnesium	820000	837000	859000	877000	N/A	N/A	935000	936000
Manganese	48.5	38.9	66.9	51.5	N/A	N/A	67	45.3
Mercury	0.00034	0.00032	0.00203	0.00236	N/A	N/A	0.00075	0.00067
Nickel	1.3	0.8	2	0.8	N/A	N/A	2	0.8
Potassium	284000	289000	267000	272000	N/A	N/A	185000	186000
Selenium	1.16	1.16	1.16	1.16	N/A	N/A	1.21	1.21
Silver	0.8	0.8	0.8	0.8	N/A	N/A	0.8	0.8
Sodium	7070000	7210000	7240000	7380000	N/A	N/A	7620000	7640000
Thallium	0.3	0.3	0.3	0.3	N/A	N/A	0.3	0.3
Tin	0.7	0.7	0.7	0.7	N/A	N/A	0.6	0.6
Vanadium	1.4	1.4	1.4	1.4	N/A	N/A	1.4	1.4
Zinc	11.9	11.9	11.9	11.9	N/A	N/A	11.9	11.9
Organometallic Compounds (µg/L)								
Methyl mercury	0.00002	0.000022	0.000021	0.000078	N/A	N/A	0.00002	0.000243
Volatile Organics (µg/L)								
Total VOCs (U = MDL)	10	1.9	10	10	N/A	N/A	25.76	10
Semivolatile Organics (µg/L)								
Total SVOCs (U = MDL)	8.914	1.3	1.2	7.985	N/A	N/A	1.3	1.2
Polycyclic Aromatic Hydrocarbons (µg/L)								
Total PAH 16 (U = MDL)	0.1634	0.15575	0.15078	0.39458	N/A	N/A	0.13183	0.13259
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)								
Total APAHs (U = MDL)	0.35139	0.31202	0.45012	0.53271	N/A	N/A	0.18725	0.13242
n-Alkanes and Isoprenoids (µg/L)								
2,6,10-Trimethyldodecane	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
2,6,10-Trimethyltridecane	0.2	0.2	0.1	0.1	N/A	N/A	0.2	0.1
n-Decane (C10)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Docosane (C22)	0.05	0.05	0.04	0.04	N/A	N/A	0.05	0.04
n-Dodecane (C12)	0.2	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Dotriacontane (C32)	0.4	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Eicosane (C20)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Heneicosane (C21)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Hentriacontane (C31)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Heptacosane (C27)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Heptadecane (C17)	0.2	0.2	0.1	0.1	N/A	N/A	0.1	0.1
n-Heptatriacontane (C37)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Hexacosane (C26)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1

Table A3-2
Analytical Surface Water Results

Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Whale Creek 0.930 WC001_20120319 WC001SW-A-20120319 3/19/2012 1.5 ft 13 ft N	Whale Creek 0.930 WC001_20120319 WC001SW-C-20120319 3/19/2012 16.5 ft 13 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-A-20120403 4/3/2012 3 - 3 ft 24 ft N	Whale Creek 0.930 WC001_20120403 WC001SW-C-20120403 4/3/2012 20 ft 24 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-A-20120408 4/8/2012 3 ft 26 ft N	Whale Creek 0.930 WC001_20120408 WC001SW-C-20120408 4/8/2012 25 ft 26 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-A-20120507 5/7/2012 2 ft 27 ft N	Whale Creek 0.930 WC001_20120507 WC001SW-C-20120507 5/7/2012 24 ft 27 ft N
n-Hexadecane (C16)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Hexatriacontane (C36)	0.2	0.2	0.1	0.1	N/A	N/A	0.2	0.1
n-Nonacosane (C29)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Nonadecane (C19)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Nonane (C9)	0.4	0.4	0.3	0.3	N/A	N/A	0.4	0.3
n-Nonatriacontane (C39)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Octacosane (C28)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Octadecane (C18)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Octatriacontane (C38)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
Norpristane	0.2	0.2	0.1	0.1	N/A	N/A	0.1	0.1
n-Pentacosane (C25)	1	1	1	1	N/A	N/A	1	1
n-Pentadecane (C15)	0.2	0.2	0.1	0.1	N/A	N/A	0.2	0.1
n-Pentatriacontane (C35)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Tetracontane (C40)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Tetracosane (C24)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Tetradecane (C14)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Tetratriacontane (C34)	0.2	0.2	0.2	0.2	N/A	N/A	0.2	0.2
n-Triacontane (C30)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Tricosane (C23)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Tridecane (C13)	1	1	1	1	N/A	N/A	1	1
n-Tritriacontane (C33)	0.2	0.1	0.1	0.1	N/A	N/A	0.1	0.1
n-Undecane (C11)	0.1	0.1	0.1	0.1	N/A	N/A	0.1	0.1
Pesticides (µg/L)								
Total Pesticides (U = MDL)	0.091	0.091	0.18	0.383	N/A	N/A	0.03871	0.04049
Herbicides (µg/L)								
Total Herbicides (U = MDL)	49	50	49	49	N/A	N/A	53	53
Dioxin Furans (ng/L)								
Total DFs (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB Aroclors (µg/L)								
Total PCB Aroclor (U = MDL)	0.0029	0.0029	0.028	0.028	N/A	N/A	0.003	0.003
PCB Congeners (ng/L)								
Total PCB Congener (U = MDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)								
Total TPH (U = MDL)	0.2603	0.1153	0.2163	0.2243	N/A	N/A	0.0403	0.0853

Table A3-2
Analytical Surface Water Results

Tributary	Whale Creek	Whale Creek	Whale Creek
River Mile	0.934	0.934	0.934
Location ID	WC001SW_20120605	WC001SW_20120605	WC001SW_20120605
Sample ID	WC001SW-A-20120605	WC001SW-B-20120605	WC001SW-C-20120605
Sample Date	6/5/2012	6/5/2012	6/5/2012
Sample Depth	2.5 ft	8.5 ft	24.5 ft
Water Column Depth	26 ft	26 ft	26 ft
Sample Type	FD	N	N
Water Quality Measurements			
Conductivity (µs/cm)	30105	31929	32841
Dissolved Oxygen (mg/L)	6.04	5.52	5.65
pH (su)	7.48	7.44	7.47
Salinity (ppt)	21.7	22.93	23.8
Temperature (deg C)	18.62	18.82	18.56
Turbidity (NTU)	2.7	4.1	6.5
Conventional Parameters (cfu/100mL)			
Coliforms, Fecal	1450	800	400
Coliforms, Total	2650	1800	1500
Conventional Parameters (mg/L)			
Alkalinity, total as calcium carbonate (CaCO ₃)	98	98	96
Ammonia as nitrogen	0.462	0.017	0.354
Biochemical Oxygen Demand (BOD-30)	5.59	4.89	3.76
Biochemical Oxygen Demand (BOD-5)	2	2	2
Bromide	36.5	39	44
Chloride (total)	12000	12000	13000
Cyanide, total	0.00325	0.002	0.004
Hardness	4000	4000	4200
Nitrate + nitrite as nitrogen	0.42	0.4	0.4
Nitrogen (Kjeldahl)	0.83	0.69	0.64
Particulate Organic Carbon (POC)	1	1	1
Phosphorus	0.171	0.147	0.142
Sulfate	1550	1700	1800
Suspended Sediment - coarse fraction	0.8198	0.961	2.0107
Suspended Sediment - fine fraction	6.65	3.84	4.57
Total organic carbon	1.4	1.4	1.4
Total suspended solids	31.5	35	41
Conventional Parameters, Dissolved (mg/L)			
Dissolved organic carbon - Dissolved	10	10	10
Nitrate + nitrite as nitrogen - Dissolved	0.45	0.54	0.47
Nitrogen (Kjeldahl) - Dissolved	0.63	1.1	0.06
Phosphorus - Dissolved	0.1575	0.14	0.136
Total dissolved solids - Dissolved	22000	24000	24000
Metals (µg/L)			
Aluminum	96.5	122	231

**Table A3-2
Analytical Surface Water Results**

	Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Whale Creek 0.934 WC001SW_20120605 WC001SW-A-20120605 6/5/2012 2.5 ft 26 ft FD	Whale Creek 0.934 WC001SW_20120605 WC001SW-B-20120605 6/5/2012 8.5 ft 26 ft N	Whale Creek 0.934 WC001SW_20120605 WC001SW-C-20120605 6/5/2012 24.5 ft 26 ft N
Antimony		1	1	1
Arsenic		1.205	1.05	0.93
Barium		17.8	14.2	14.2
Beryllium		1	1	1
Cadmium		0.5	0.5	0.5
Calcium		261500	266000	276000
Chromium		2	2	2
Cobalt		1	1	1
Copper		2.55	1.9	2.8
Iron		258.5	264	422
Lead		2	2	2
Magnesium		815500	823000	859000
Manganese		68.55	61.1	62.5
Mercury		0.003435	0.00457	0.00894
Nickel		1.15	1	1
Potassium		243500	256000	267000
Selenium		1.16	1.16	1.16
Silver		1	1	1
Sodium		6980000	7040000	7300000
Thallium		0.3	0.3	0.3
Tin		0.6	0.6	0.6
Vanadium		2.1	1.9	2.3
Zinc		12	12	12
Metals, Dissolved (µg/L)				
Aluminum		20	20	43
Antimony		1	1	1
Arsenic		1.24	1.04	1.04
Barium		18.35	16.4	13.4
Beryllium		1	1	1
Cadmium		0.5	0.5	0.5
Calcium		247000	258000	270000
Chromium		2	2	2
Cobalt		1	1	1
Copper		1.35	1	1.4
Iron		130	130	130
Lead		2	2	2

**Table A3-2
Analytical Surface Water Results**

	Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Whale Creek 0.934 WC001SW_20120605 WC001SW-A-20120605 6/5/2012 2.5 ft 26 ft FD	Whale Creek 0.934 WC001SW_20120605 WC001SW-B-20120605 6/5/2012 8.5 ft 26 ft N	Whale Creek 0.934 WC001SW_20120605 WC001SW-C-20120605 6/5/2012 24.5 ft 26 ft N
Magnesium		796500	857000	860000
Manganese		65.75	63.1	52.6
Mercury		0.000335	0.00037	0.00028
Nickel		1	1	1
Potassium		229500	240000	258000
Selenium		1.16	1.16	1.16
Silver		1	1	1
Sodium		6825000	7360000	7300000
Thallium		0.3	0.3	0.3
Tin		0.6	0.6	0.6
Vanadium		1.35	2.4	2
Zinc		12	12	12
Organometallic Compounds (µg/L)				
Methyl mercury		0.0000495	0.000036	0.000038
Volatile Organics (µg/L)				
Total VOCs (U = MDL)		26.56	26.06	26.06
Semivolatile Organics (µg/L)				
Total SVOCs (U = MDL)		1.2	1.2	1.2
Polycyclic Aromatic Hydrocarbons (µg/L)				
Total PAH 16 (U = MDL)		0.15206	0.16121	0.17634
Alkylated Polycyclic Aromatic Hydrocarbons (µg/L)				
Total APAHs (U = MDL)		0.34621	0.29506	0.26135
n-Alkanes and Isoprenoids (µg/L)				
2,6,10-Trimethyldodecane		0.1	0.1	0.1
2,6,10-Trimethyltridecane		0.1	0.1	0.1
n-Decane (C10)		0.1	0.1	0.1
n-Docosane (C22)		0.04	0.04	0.04
n-Dodecane (C12)		0.1	0.1	0.1
n-Dotriacontane (C32)		0.1	0.1	0.1
n-Eicosane (C20)		0.1	0.1	0.1
n-Heneicosane (C21)		0.1	0.1	0.1
n-Hentriacontane (C31)		0.1	0.1	0.1
n-Heptacosane (C27)		0.1	0.1	0.1
n-Heptadecane (C17)		0.1	0.1	0.1
n-Heptatriacontane (C37)		0.2	0.2	0.2
n-Hexacosane (C26)		0.1	0.1	0.1

Table A3-2
Analytical Surface Water Results

	Tributary River Mile Location ID Sample ID Sample Date Sample Depth Water Column Depth Sample Type	Whale Creek 0.934 WC001SW_20120605 WC001SW-A-20120605 6/5/2012 2.5 ft 26 ft FD	Whale Creek 0.934 WC001SW_20120605 WC001SW-B-20120605 6/5/2012 8.5 ft 26 ft N	Whale Creek 0.934 WC001SW_20120605 WC001SW-C-20120605 6/5/2012 24.5 ft 26 ft N
n-Hexadecane (C16)		0.2	0.2	0.2
n-Hexatriacontane (C36)		0.1	0.1	0.1
n-Nonacosane (C29)		0.1	0.1	0.1
n-Nonadecane (C19)		0.2	0.2	0.2
n-Nonane (C9)		0.3	0.3	0.3
n-Nonatriacontane (C39)		0.2	0.2	0.2
n-Octacosane (C28)		0.2	0.2	0.2
n-Octadecane (C18)		0.1	0.1	0.1
n-Octatriacontane (C38)		0.2	0.2	0.2
Norpristane		0.1	0.1	0.1
n-Pentacosane (C25)		1	1	1
n-Pentadecane (C15)		0.1	0.1	0.1
n-Pentatriacontane (C35)		0.2	0.2	0.2
n-Tetracontane (C40)		0.2	0.2	0.2
n-Tetracosane (C24)		0.1	0.1	0.1
n-Tetradecane (C14)		0.1	0.1	0.1
n-Tetratriacontane (C34)		0.2	0.2	0.2
n-Triacontane (C30)		0.1	0.1	0.1
n-Tricosane (C23)		0.2	0.2	0.1
n-Tridecane (C13)		1	1	1
n-Tritriacontane (C33)		0.1	0.1	0.1
n-Undecane (C11)		0.1	0.1	0.1
Pesticides (µg/L)				
Total Pesticides (U = MDL)		0.037795	0.03628	0.018
Herbicides (µg/L)				
Total Herbicides (U = MDL)		49	49	49
Dioxin Furans (ng/L)				
Total DFs (U = MDL)		N/A	N/A	N/A
PCB Aroclors (µg/L)				
Total PCB Aroclor (U = MDL)		0.0028	0.0028	0.0028
PCB Congeners (ng/L)				
Total PCB Congener (U = MDL)		N/A	N/A	N/A
Total Petroleum Hydrocarbons (mg/L)				
Total TPH (U = MDL)		0.1473	0.1403	0.006

Table A3-2
Analytical Surface Water Results

Notes:
1 = Average results is presented for field duplicates.
bold = detected limit
µg/L = microgram per liter
µs/cm = microsiemen per centimeter
APAH = alkylated polycyclic aromatic hydrocarbon
cfu = colony-forming unit
deg C = degree Celsius
DF = dioxin furan
FS = Feasibility Study
ft = foot
ID = identification
MDL = method detection limit
mg/L = milligram per liter
mL = milliliter
N = normal environmental
N/A = not applicable
ng/L = nanogram per liter
NTU = nephelometric turbidity unit
PAH = polycyclic aromatic hydrocarbon
PCB = polychlorinated biphenyl
ppth = parts per thousand
RI = Remedial Investigation
SU = standard unit
SVOC = semivolatile organic compound
TPH = total petroleum hydrocarbon
U = compound analyzed but not detected above detection limit
VOC = volatile organic compound
WS = surface water

DRAFT