

Table A7-2
Ecological Surface Water Chemistry Results, Spring 2012

Task		Spring Benthic Community 2012	Spring Benthic Community 2012	Spring Benthic Community 2012	Spring Benthic Community 2012	Spring Benthic Community 2012	Spring Benthic Community 2012	Spring Benthic Community 2012	Spring Benthic Community 2012
Tributary		Dutch Kills	Dutch Kills	Dutch Kills	East Branch	East Branch	East Branch	English Kills	English Kills
River Mile		0.97	1.21	1.44	3	3.11	3.11	2.91	2.9
Location ID		DK003	DK007	DK011	EB006	EB008	EB008	EK001	EK002
Sample ID		DK003BC-C-20120417	DK007BC-C-20120419	DK011BC-C-20120419	EB006BC-C-20120430	EB008BC-C-20120425	EB1008BC-C-20120425	EK001BC-C-20120417	EK002BC-C-20120430
Sample Date		4/17/2012	4/19/2012	4/19/2012	4/30/2012	4/25/2012	4/25/2012	4/17/2012	4/30/2012
Sample Depth		2.5 ft	11 ft	7.5 ft	17.5 ft	8 ft	8 ft	9.5 ft	18.5 ft
Water Column Depth		3.6	12	9	18.7	10.9	10.9	11	19.7
Sample Type		N	N	N	N	N	FD	N	N
Water Quality Measurements									
Conductivity (field) (µs/cm)	YSI 6920 Sonde	31805	31920	31377	27093	27562	-	30464	27237
Dissolved Oxygen (field) (mg/L)	YSI 6920 Sonde	11.5	4.33	1.86	0.22	0.15	-	9.07	0.51
pH (field) (SU)	YSI 6920 Sonde	8.03	7.36	7.14	6.92	7.04	-	7.66	6.92
Salinity (field) (ppth)	YSI 6920 Sonde	25.86	26.71	26.21	22.08	22.23	-	25.53	22.19
Temperature (field) (deg C)	YSI 6920 Sonde	13.94	12.73	12.74	13.11	13.55	-	12.5	13.15
Turbidity (field) (NTU)	YSI 6920 Sonde	NR	9.8	4.4	19	26.9	-	NR	8.3
Conventional Parameters (mg/L)									
Ammonia as nitrogen	E350.1	0.155	0.654	0.9	1.39 J	0.075 UJ	0.811 J	0.31	1.26 J
Nitrate + nitrite as nitrogen	SM4500NO3F	0.18	0.14	0.04 J	0.07 J	0.09 J	0.08 J	0.21	0.14
Nitrogen (kjeldahl)	SM4500NORGC	0.65	1.1	1.4	2.1	1.5	1.4	0.82	1.8
Particulate organic carbon (POC)	SW9060M	2.25	1.49	1.23	1.35	1.56	1.47	2.04	1 U
Phosphorus	SM4500PE	0.127	0.21	0.31	0.513	0.235	0.225	0.17	0.329
Total organic carbon	SM5310C	0.38 J	0.35 J	0.41 J	3.8 J	3.9 J	3.9 J	0.41 J	3.6 J
Total suspended solids	SM2540D	20	7.1	11	14	24	30	11	23
Conventional Parameters, Dissolved (mg/L)									
Dissolved organic carbon	SM5310C	-- R	1 UJ	1 UJ	-- R	-- R	-- R	-- R	-- R
Nitrate + nitrite as nitrogen	SM4500NO3F	0.16	0.14	0.03 J	0.06 J	0.08 J	0.07 J	0.2	0.15
Nitrogen (kjeldahl)	SM4500NORGC	0.41 U	0.92	0.94	1.8	1.1	1.1	0.67	1.5
Phosphorus	SM4500PE	0.056	0.1	0.221	0.494	0.17	0.17	0.063	0.113
Total dissolved solids	SM2540C	22000	24000	23000	22000	22000	22000	23000	22000

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Tributary		English Kills	English Kills	English Kills	Maspeth Creek	Maspeth Creek	Newtown Creek	Newtown Creek	Newtown Creek
River Mile		3.31	3.58	3.74	2.49	2.57	0.1	0.09	0.08
Location ID		EK010	EK016	EK021	MC002	MC006	NC002	NC003	NC004
Sample ID		EK010BC-C-20120423	EK016BC-C-20120423	EK021BC-C-20120503	MC002BC-C-20120419	MC006BC-C-20120504	NC002BC-C-20120501	NC003BC-C-20120501	NC004BC-C-20120501
Sample Date		4/23/2012	4/23/2012	5/3/2012	4/19/2012	5/4/2012	5/1/2012	5/1/2012	5/1/2012
Sample Depth		10 ft	11.5 ft	4.5 ft	4 ft	3.5 ft	8 ft	17.5 ft	13.5 ft
Water Column Depth		11.4	12.7	5.6	5	4.7	9.3	18.5	15.9
Sample Type		N	N	N	N	N	N	N	N
Water Quality Measurements									
Conductivity (field) (µs/cm)	YSI 6920 Sonde	28870	28718	26212	31111	26048	27204	27572	27377
Dissolved Oxygen (field) (mg/L)	YSI 6920 Sonde	2.49	1.46	1.57	9.6	1.69	7.3	7.17	7.76
pH (field) (SU)	YSI 6920 Sonde	7.15	7.05	6.8	7.75	6.91	7.43	7.36	7.52
Salinity (field) (ppth)	YSI 6920 Sonde	23.67	23.57	21.2	25.51	21.04	22.58	22.71	22.71
Temperature (field) (deg C)	YSI 6920 Sonde	13.13	13.05	13.21	13.42	13.36	12.42	12.77	12.46
Turbidity (field) (NTU)	YSI 6920 Sonde	5.7	6.2	7.2	NR	6.4	3.7	6.4	6.2
Conventional Parameters (mg/L)									
Ammonia as nitrogen	E350.1	0.708	0.744	1.1 J	0.179	0.944 J	0.473 J	0.616 J	0.439 J
Nitrate + nitrite as nitrogen	SM4500NO3F	0.18	0.16	0.27	0.18	0.24	0.43	0.48	0.39
Nitrogen (kjeldahl)	SM4500NORGC	1.2	1.3	1.6	0.7	1.5	0.86 U	1 U	0.93 U
Particulate organic carbon (POC)	SW9060M	1 U	1.66	1 U	2.21	1 UJ	1 U	1 U	1 U
Phosphorus	SM4500PE	0.309	0.267	0.27	0.162	0.214	0.133	0.172	0.105
Total organic carbon	SM5310C	0.34 J	0.36 J	3.4 J	0.37 J	3.5 J	2.7 J	2.7 J	2.6 J
Total suspended solids	SM2540D	8.7	13	15	13	15	17	35	15
Conventional Parameters, Dissolved (mg/L)									
Dissolved organic carbon	SM5310C	-- R	-- R	4 U	1 UJ	4 U	-- R	-- R	-- R
Nitrate + nitrite as nitrogen	SM4500NO3F	0.17	0.17	0.27	0.16	0.24	0.42	0.48	0.39
Nitrogen (kjeldahl)	SM4500NORGC	0.99	1	1.6	0.47	1.3	0.7 U	1	0.85 U
Phosphorus	SM4500PE	0.128	0.148	0.175	0.036	0.154 J	0.123	0.151	0.097
Total dissolved solids	SM2540C	24000	24000	22000	23000	21000	23000	23000	23000

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Task	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	
Tributary	0.21	0.21	0.21	0.58	0.58	0.57	0.57	1.01	
River Mile	NC006	NC007	NC008	NC017	NC018	NC019	NC019	NC029	
Location ID	NC006BC-C-20120503	NC007BC-C-20120502	NC008BC-C-20120503	NC017BC-C-20120502	NC018BC-C-20120416	NC019BC-C-20120416	NC1019BC-C-20120416	NC029BC-C-20120424	
Sample ID	5/3/2012	5/2/2012	5/3/2012	5/2/2012	4/16/2012	4/16/2012	4/16/2012	4/24/2012	
Sample Date	3 ft	18.5 ft	5.5 ft	8.5 ft	25 ft	5.5 ft	5.5 ft	13.5 ft	
Sample Depth	4.7	21.1	6.7	10	26.5	7.1	7.1	15.7	
Water Column Depth	N	N	N	N	N	N	FD	N	
Sample Type									
Water Quality Measurements									
Conductivity (field) (µs/cm)	YSI 6920 Sonde	27111	28295	27696	27480	31747	32034	-	28860
Dissolved Oxygen (field) (mg/L)	YSI 6920 Sonde	5.72	7.26	6.74	5.84	9.54	11.83	-	6.15
pH (field) (SU)	YSI 6920 Sonde	7.27	7.45	7.35	7.24	7.8	8.06	-	7.38
Salinity (field) (ppth)	YSI 6920 Sonde	22.34	23.7	22.9	22.46	27.07	26.22	-	24.02
Temperature (field) (deg C)	YSI 6920 Sonde	12.78	12.23	12.67	13.07	12.02	13.58	-	12.56
Turbidity (field) (NTU)	YSI 6920 Sonde	7.5	7.9	3.9	6.5	1.5	0.2	-	10
Conventional Parameters (mg/L)									
Ammonia as nitrogen	E350.1	0.772 J	0.396 J	0.586 J	0.631 J	0.342	0.2	0.186	0.098 UJ
Nitrate + nitrite as nitrogen	SM4500NO3F	0.42	0.38	0.43	0.44	0.23	0.2	0.19	0.28
Nitrogen (kjeldahl)	SM4500NORGC	1.6	1 U	1	1.1 U	0.68	0.67	0.67	1.2
Particulate organic carbon (POC)	SW9060M	1 U	1 U	1 U	1 U	1.09	1.09	2.41	1 UJ
Phosphorus	SM4500PE	0.173	0.121	0.135	0.178	0.143	0.129	0.123	0.17
Total organic carbon	SM5310C	3 J	2.5 J	2.8 J	3.1 J	0.27 J	0.36 J	0.36 J	2.7 J
Total suspended solids	SM2540D	27	20	13	12	13	22	25	19
Conventional Parameters, Dissolved (mg/L)									
Dissolved organic carbon	SM5310C	4 U	-- R	4 U	-- R	-- R	-- R	-- R	-- R
Nitrate + nitrite as nitrogen	SM4500NO3F	0.44	0.38	0.43	0.45	0.23	0.18	0.18	0.25
Nitrogen (kjeldahl)	SM4500NORGC	0.99 U	0.76 U	0.86 U	0.94	0.6	0.45	0.39 U	0.93
Phosphorus	SM4500PE	0.135	0.094	0.138 J	0.133	0.103	0.042	0.038	0.133
Total dissolved solids	SM2540C	23000	24000	24000	22000	25000	23000	23000	24000

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Task	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek
Tributary	1.16	1.16	1.16	1.54	1.54	1.94	1.95	2.43	
River Mile	NC033	NC034	NC035	NC046	NC047	NC058	NC059	NC069	
Location ID	NC033BC-C-20120416	NC034BC-C-20120416	NC035BC-C-20120416	NC046BC-C2-20120504	NC047BC-C2-20120504	NC058BC-C-20120430	NC059BC-C-20120424	NC069BC-C-20120425	
Sample ID	4/16/2012	4/16/2012	4/16/2012	5/4/2012	5/4/2012	4/30/2012	4/24/2012	4/25/2012	
Sample Date	18.5 ft	21.5 ft	10.5 ft	20 ft	11.5 ft	26 ft	13.5 ft	20.5 ft	
Sample Depth	19.6	23.7	13	22.1	12.7	26.9	15.2	21.3	
Water Column Depth	N	N	N	N	N	N	N	N	
Sample Type									
Water Quality Measurements									
Conductivity (field) (µs/cm)	YSI 6920 Sonde	31149	31262	31147	27879	27209	26938	28990	29149
Dissolved Oxygen (field) (mg/L)	YSI 6920 Sonde	8.69	8.77	8.91	3.41	5.32	5.82	3.98	1.63
pH (field) (SU)	YSI 6920 Sonde	7.73	7.75	7.79	7.3	7.21	7.24	7.22	7.09
Salinity (field) (ppth)	YSI 6920 Sonde	26.82	27.02	26.69	23.14	22.42	22.23	23.76	23.85
Temperature (field) (deg C)	YSI 6920 Sonde	11.53	11.45	11.81	12.53	12.82	12.62	13.14	13.22
Turbidity (field) (NTU)	YSI 6920 Sonde	0.4	NR	4.3	4.1	3.2	5.1	12.9	7.5
Conventional Parameters (mg/L)									
Ammonia as nitrogen	E350.1	0.434	0.44	0.433	0.621 J	0.673 J	0.658 J	0.666 J	0.9 J
Nitrate + nitrite as nitrogen	SM4500NO3F	0.25	0.24	0.24	0.43	0.4	0.42	0.28	0.17
Nitrogen (kjeldahl)	SM4500NORGC	0.7	0.72	0.79	1	1.1	1.1 U	1.3	0.84 U
Particulate organic carbon (POC)	SW9060M	2.18	1 U	1 U	1 UJ	1 UJ	1 U	1.68 J	1 U
Phosphorus	SM4500PE	0.17	0.139	0.137	0.144	0.172	0.16	0.208	0.273
Total organic carbon	SM5310C	0.5 UJ	0.31 J	0.34 J	2.9 J	3.1 J	3 J	3.1 J	3.2 J
Total suspended solids	SM2540D	22	14	12	15	16	10	23	16
Conventional Parameters, Dissolved (mg/L)									
Dissolved organic carbon	SM5310C	-- R	-- R	-- R	4 U	4 U	-- R	-- R	-- R
Nitrate + nitrite as nitrogen	SM4500NO3F	0.24	0.24	0.24	0.43	0.41	0.43	0.29	0.18
Nitrogen (kjeldahl)	SM4500NORGC	0.65	0.68	0.67	0.87 U	0.94 U	0.97	0.97	1.1
Phosphorus	SM4500PE	0.103	0.105	0.09	0.173 J	0.145 J	0.136	0.117	0.129
Total dissolved solids	SM2540C	24000	24000	24000	24000	23000	22000	24000	24000

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Task	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	Spring Benthic Community 2012 Newtown Creek	
Tributary	2.43	2.61	2.62	2.63	
River Mile	NC071	NC075	NC076	NC077	
Location ID	NC071BC-C-20120425	NC075BC-C-20120420	NC076BC-C-20120420	NC077BC-C-20120420	
Sample ID	4/25/2012	4/20/2012	4/20/2012	4/20/2012	
Sample Date	14.5 ft	17 ft	15 ft	4.5 ft	
Sample Depth	15.8	18.6	17.9	5.8	
Water Column Depth	N	N	N	N	
Sample Type					
Water Quality Measurements					
Conductivity (field) (µs/cm)	YSI 6920 Sonde	28065	31901	31956	31637
Dissolved Oxygen (field) (mg/L)	YSI 6920 Sonde	3.46	7.45	6.43	9.97
pH (field) (SU)	YSI 6920 Sonde	7.17	7.8	7.55	7.79
Salinity (field) (ppth)	YSI 6920 Sonde	22.95	26.64	26.72	25.88
Temperature (field) (deg C)	YSI 6920 Sonde	13.11	12.82	12.77	13.57
Turbidity (field) (NTU)	YSI 6920 Sonde	6.4	6.6	7.6	4.6
Conventional Parameters (mg/L)					
Ammonia as nitrogen	E350.1	0.697 J	0.374	0.427	0.168
Nitrate + nitrite as nitrogen	SM4500NO3F	0.26	0.21	0.21	0.19
Nitrogen (kjeldahl)	SM4500NORGC	1.3	0.76	0.79	0.68
Particulate organic carbon (POC)	SW9060M	1 U	2.04	2.29	1.16
Phosphorus	SM4500PE	0.175	0.234	0.163	0.151
Total organic carbon	SM5310C	3.2 J	0.29 J	0.28 J	0.37 J
Total suspended solids	SM2540D	12	14	13	13
Conventional Parameters, Dissolved (mg/L)					
Dissolved organic carbon	SM5310C	-- R	-- R	-- R	-- R
Nitrate + nitrite as nitrogen	SM4500NO3F	0.27	0.21	0.2	0.19
Nitrogen (kjeldahl)	SM4500NORGC	0.9	0.7	0.74	0.44 U
Phosphorus	SM4500PE	0.099	0.079	0.077	0.033
Total dissolved solids	SM2540C	23000	24000	25000	24000

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Notes:
Bold = Detected result
– Water column depth represents the measured depth prior to sampling. The water column depth may change (due to tides) during the sampling event.
μs/cm = microsiemen per centimeter
deg C = degree Celsius
FD = field duplicate
FS = Feasibility Study
ft = foot
J = estimated value
mg/L = milligram per liter
N = normal environmental
NR = no reading
NTU = nephelometric turbidity unit
ppth = parts per thousand
R = rejected
RI = Remedial Investigation
SU = standard unit
U = compound analyzed but not detected above detection limit
UJ = compound analyzed but not detected above estimated detection limit
WS = surface water

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