



## **STAGE II ENVIRONMENTAL RISK CHARACTERIZATION**

Former Gloucester Manufactured Gas Plant Facility  
Gloucester, Massachusetts

**Prepared for:**

National Grid  
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**Attachment A**

**Benthic Macroinvertebrate Community Data**

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N14E11-G1-A	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	8	0.1	0.28	29
Lotic	N14E11-G1-A	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella pinguis	1	0.1	0.28	4
Lotic	N14E11-G1-A	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis reinhardi	1	0.1	0.28	4
Lotic	N14E11-G1-A	5/20/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella sp.	5	0.1	0.28	18
Lotic	N14E11-G1-A	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	177	0.1	0.28	632
Lotic	N14E11-G1-A	5/20/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	5	0.1	0.28	18
Lotic	N14E11-G1-A	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	17	0.1	0.28	61
Lotic	N14E11-G1-A	5/20/2008	Annelida		Polychaeta			Nephtyidae	Nephtys incisa	1	0.1	0.28	4
Lotic	N14E11-G1-B	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	71	0.1	0.17	418
Lotic	N14E11-G1-B	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	0.17	24
Lotic	N14E11-G1-B	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis macrocoxa	2	0.1	0.17	12
Lotic	N14E11-G1-B	5/20/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	6	0.1	0.17	35
Lotic	N14E11-G1-B	5/20/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	4	0.1	0.17	24
Lotic	N14E11-G1-B	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	117	0.1	0.17	688
Lotic	N14E11-G1-B	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	5	0.1	0.17	29
Lotic	N14E11-G1-B	5/20/2008	Annelida		Polychaeta			Polynoidae	Polynoidae	1	0.1	0.17	6
Lotic	N14E11-G1-C	5/20/2008	Arthropoda	Crustacea		Amphipoda	Caprellidea	Caprellidae	Caprella sp.	1	0.1	0.19	5
Lotic	N14E11-G1-C	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	33	0.1	0.19	174
Lotic	N14E11-G1-C	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella pinguis	1	0.1	0.19	5
Lotic	N14E11-G1-C	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	0.19	5
Lotic	N14E11-G1-C	5/20/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	6	0.1	0.19	32
Lotic	N14E11-G1-C	5/20/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	6	0.1	0.19	32
Lotic	N14E11-G1-C	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	151	0.1	0.19	795
Lotic	N14E11-G1-C	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	8	0.1	0.19	42
Lotic	LC-NE1-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	9	0.1	1.00	9
Lotic	LC-NE1-G1-A	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	4	0.1	1.00	4
Lotic	LC-NE1-G1-A	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	12	0.1	1.00	12
Lotic	LC-NE1-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	26	0.1	1.00	26
Lotic	LC-NE1-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	1.00	4
Lotic	LC-NE1-G1-B	5/21/2008	Nemertea						Nemertea	1	0.1	1.00	1
Lotic	LC-NE1-G1-B	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	1	0.1	1.00	1
Lotic	LC-NE1-G1-B	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	8	0.1	1.00	8
Lotic	LC-NE1-G1-B	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	1.00	1
Lotic	LC-NE1-G1-B	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	1	0.1	1.00	1
Lotic	LC-NE1-G1-B	5/21/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	20	0.1	1.00	20
Lotic	LC-NE1-G1-B	5/21/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	5	0.1	1.00	5
Lotic	LC-NE1-G1-B	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	6	0.1	1.00	6
Lotic	LC-NE1-G1-B	5/21/2008	Mollusca		Bivalvia	Mytiloidea		Mytilidae	Modiolus modiolus	1	0.1	1.00	1
Lotic	LC-NE1-G1-B	5/21/2008	Mollusca		Bivalvia	Mytiloidea		Yoldiidae	Yoldia sp.	1	0.1	1.00	1
Lotic	LC-NE1-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	47	0.1	1.00	47
Lotic	LC-NE1-G1-C	5/21/2008	Nematoda						Nematoda	2	0.1	1.00	2
Lotic	LC-NE1-G1-C	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	1	0.1	1.00	1
Lotic	LC-NE1-G1-C	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	3	0.1	1.00	3
Lotic	LC-NE1-G1-C	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	10	0.1	1.00	10

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Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	LC-NE1-G1-C	5/21/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	1	0.1	1.00	1
Lotic	LC-NE1-G1-C	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	7	0.1	1.00	7
Lotic	LC-NE1-G1-C	5/21/2008	Mollusca		Bivalvia	Mytiloidea		Tellinidae	Tellina sp.	1	0.1	1.00	1
Lotic	LC-NE2-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	7	0.1	1.00	7
Lotic	LC-NE2-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	3	0.1	1.00	3
Lotic	LC-NE2-G1-B	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	2	0.1	1.00	2
Lotic	LC-NE2-G1-B	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	13	0.1	1.00	13
Lotic	LC-NE2-G1-B	5/21/2008	Annelida		Polychaeta			Phyllodocidae	Eteone sp.	1	0.1	1.00	1
Lotic	LC-NE2-G1-B	5/21/2008	Annelida		Polychaeta			Nephtyidae	Nephtys incisa	2	0.1	1.00	2
Lotic	LC-NE2-G1-B	5/21/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	3	0.1	1.00	3
Lotic	LC-NE2-G1-B	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	14	0.1	1.00	14
Lotic	LC-NE2-G1-B	5/21/2008	Mollusca		Bivalvia	Mytiloidea		Mytilidae	Modiolus modiolus	1	0.1	1.00	1
Lotic	LC-NE2-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	1.00	2
Lotic	LC-NE2-G1-C	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	4	0.1	1.00	4
Lotic	LC-NE2-G1-C	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	7	0.1	1.00	7
Lotic	LC-NE2-G1-C	5/21/2008	Annelida		Polychaeta			Nephtyidae	Nephtys sp.	2	0.1	1.00	2
Lotic	LC-NE2-G1-C	5/21/2008	Annelida		Polychaeta			Nereididae	Nereis sp.	1	0.1	1.00	1
Lotic	LC-NE2-G1-C	5/21/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	2	0.1	1.00	2
Lotic	LC-NE2-G1-C	5/21/2008	Annelida		Polychaeta			Spionidae	Streblospio benedicti	1	0.1	1.00	1
Lotic	LC-NE2-G1-C	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	4	0.1	1.00	4
Lotic	LC-SW1-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	57	0.1	0.14	407
Lotic	LC-SW1-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	2	0.1	0.14	14
Lotic	LC-SW1-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	0.14	7
Lotic	LC-SW1-G1-A	5/21/2008	Nematoda						Nematoda	2	0.1	0.14	14
Lotic	LC-SW1-G1-A	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	5	0.1	0.14	36
Lotic	LC-SW1-G1-A	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	145	0.1	0.14	1036
Lotic	LC-SW1-G1-A	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.14	7
Lotic	LC-SW1-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	75	0.1	0.22	341
Lotic	LC-SW1-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	6	0.1	0.22	27
Lotic	LC-SW1-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	6	0.1	0.22	27
Lotic	LC-SW1-G1-B	5/21/2008	Nematoda						Nematoda	7	0.1	0.22	32
Lotic	LC-SW1-G1-B	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	3	0.1	0.22	14
Lotic	LC-SW1-G1-B	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	100	0.1	0.22	455
Lotic	LC-SW1-G1-B	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	3	0.1	0.22	14
Lotic	LC-SW1-G1-B	5/21/2008	Mollusca		Bivalvia	Mytiloidea		Mytilidae	Modiolus modiolus	2	0.1	0.22	9
Lotic	LC-SW1-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	82	0.1	0.17	482
Lotic	LC-SW1-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	3	0.1	0.17	18
Lotic	LC-SW1-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.17	12
Lotic	LC-SW1-G1-C	5/21/2008	Nematoda						Nematoda	5	0.1	0.17	29
Lotic	LC-SW1-G1-C	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	5	0.1	0.17	29
Lotic	LC-SW1-G1-C	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	108	0.1	0.17	635
Lotic	LC-SW1-G1-C	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.17	6
Lotic	LC-SW1-G1-C	5/21/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	1	0.1	0.17	6
Lotic	LC-NE2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	1	0.1	1.00	1

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Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	LC-NE2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	1.00	2
Lotic	LC-NE2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	1.00	1
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	3	0.1	1.00	3
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	35	0.1	1.00	35
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	1	0.1	1.00	1
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Spionidae	Polydora websteri	3	0.1	1.00	3
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Spionidae	Spionidae	2	0.1	1.00	2
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	17	0.1	1.00	17
Lotic	N9E15-G1-A	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	54	0.1	0.14	386
Lotic	N9E15-G1-A	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella pinguis	4	0.1	0.14	29
Lotic	N9E15-G1-A	5/20/2008	Nematoda						Nematoda	1	0.1	0.14	7
Lotic	N9E15-G1-A	5/20/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	4	0.1	0.14	29
Lotic	N9E15-G1-A	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	135	0.1	0.14	964
Lotic	N9E15-G1-A	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	3	0.1	0.14	21
Lotic	N9E15-G1-B	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	74	0.1	0.25	296
Lotic	N9E15-G1-B	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella pinguis	7	0.1	0.25	28
Lotic	N9E15-G1-B	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.25	8
Lotic	N9E15-G1-B	5/20/2008	Nemertea						Nemertea	1	0.1	0.25	4
Lotic	N9E15-G1-B	5/20/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	5	0.1	0.25	20
Lotic	N9E15-G1-B	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	103	0.1	0.25	412
Lotic	N9E15-G1-B	5/20/2008	Annelida		Polychaeta			Capitellidae	Capitella sp.	2	0.1	0.25	8
Lotic	N9E15-G1-B	5/20/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	9	0.1	0.25	36
Lotic	N9E15-G1-B	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	15	0.1	0.25	60
Lotic	N9E15-G1-B	5/20/2008	Annelida		Polychaeta			Polynoidae	Polynoidae	1	0.1	0.25	4
Lotic	N9E15-G1-C	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	45	0.1	0.28	161
Lotic	N9E15-G1-C	5/20/2008	Arthropoda	Crustacea	Maxillopoda				Copepoda	1	0.1	0.28	4
Lotic	N9E15-G1-C	5/20/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	2	0.1	0.28	7
Lotic	N9E15-G1-C	5/20/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.28	7
Lotic	N9E15-G1-C	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	152	0.1	0.28	543
Lotic	N9E15-G1-C	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	4	0.1	0.28	14
Lotic	N9E15-G1-C	5/20/2008	Annelida		Polychaeta			Polynoidae	Polynoidae	2	0.1	0.28	7
Lotic	N17E6-G1-A	5/20/2008	Arthropoda	Crustacea		Decapoda		Cancriidae	Cancer borealis	1	0.1	1.00	1
Lotic	N17E6-G1-A	5/20/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	1	0.1	1.00	1
Lotic	N17E6-G1-A	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	30	0.1	1.00	30
Lotic	N17E6-G1-A	5/20/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	7	0.1	1.00	7
Lotic	N17E6-G1-A	5/20/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	58	0.1	1.00	58
Lotic	N17E6-G1-A	5/20/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	6	0.1	1.00	6
Lotic	N17E6-G1-A	5/20/2008	Annelida		Polychaeta			Spionidae	Streblospio benedicti	2	0.1	1.00	2
Lotic	N17E6-G1-A	5/20/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	142	0.1	1.00	142
Lotic	N17E6-G1-A	5/20/2008	Mollusca		Gastropoda	Neotaenioglossa		Calyptraeidae	Crepidula plana	1	0.1	1.00	1
Lotic	N17E6-G1-A	5/20/2008	Mollusca		Bivalvia	Mytiloidea		Tellinidae	Tellina sp.	1	0.1	1.00	1
Lotic	N17E6-G1-B	5/20/2008	Nemertea						Nemertea	1	0.1	0.22	5
Lotic	N17E6-G1-B	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	93	0.1	0.22	423
Lotic	N17E6-G1-B	5/20/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	7	0.1	0.22	32

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Lotic	N17E6-G1-B	5/20/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	14	0.1	0.22	64
Lotic	N17E6-G1-B	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	1	0.1	0.22	5
Lotic	N17E6-G1-B	5/20/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	5	0.1	0.22	23
Lotic	N17E6-G1-B	5/20/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	94	0.1	0.22	427
Lotic	N17E6-G1C	5/20/2008	Nemertea						Nemertea	1	0.1	1.00	1
Lotic	N17E6-G1C	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	66	0.1	1.00	66
Lotic	N17E6-G1C	5/20/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	10	0.1	1.00	10
Lotic	N17E6-G1C	5/20/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	8	0.1	1.00	8
Lotic	N17E6-G1C	5/20/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	1	0.1	1.00	1
Lotic	N17E6-G1C	5/20/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	66	0.1	1.00	66
Lotic	N-2E21-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.14	7
Lotic	N-2E21-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus sp.	1	0.1	0.14	7
Lotic	N-2E21-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	82	0.1	0.14	586
Lotic	N-2E21-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	14	0.1	0.14	100
Lotic	N-2E21-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	22	0.1	0.14	157
Lotic	N-2E21-G1-A	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.14	7
Lotic	N-2E21-G1-A	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.14	14
Lotic	N-2E21-G1-A	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	62	0.1	0.14	443
Lotic	N-2E21-G1-A	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	9	0.1	0.14	64
Lotic	N-2E21-G1-A	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	49	0.1	0.14	350
Lotic	N-2E21-G1-A	5/22/2008	Annelida		Polychaeta			Phyllodocidae	Eteone sp.	1	0.1	0.14	7
Lotic	N-2E21-G1-A	5/22/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	1	0.1	0.14	7
Lotic	N-2E21-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.19	5
Lotic	N-2E21-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	56	0.1	0.19	295
Lotic	N-2E21-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	22	0.1	0.19	116
Lotic	N-2E21-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	7	0.1	0.19	37
Lotic	N-2E21-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	0.19	5
Lotic	N-2E21-G1-B	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	142	0.1	0.19	747
Lotic	N-2E21-G1-B	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.19	11
Lotic	N-2E21-G1-B	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	2	0.1	0.19	11
Lotic	N-2E21-G1-B	5/22/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	3	0.1	0.19	16
Lotic	N-2E21-G1-B	5/22/2008	Annelida		Polychaeta			Nephtyidae	Nephtys sp.	1	0.1	0.19	5
Lotic	N-2E21-G1-B	5/22/2008	Annelida		Polychaeta			Opheliidae	Ophelina acuminata	1	0.1	0.19	5
Lotic	N-2E21-G1-B	5/22/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.19	5
Lotic	N-2E21-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus sp.	2	0.1	0.17	12
Lotic	N-2E21-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	72	0.1	0.17	424
Lotic	N-2E21-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	20	0.1	0.17	118
Lotic	N-2E21-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	4	0.1	0.17	24
Lotic	N-2E21-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	3	0.1	0.17	18
Lotic	N-2E21-G1-C	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.17	6
Lotic	N-2E21-G1-C	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.17	12
Lotic	N-2E21-G1-C	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	58	0.1	0.17	341
Lotic	N-2E21-G1-C	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	37	0.1	0.17	218
Lotic	N-2E21-G1-C	5/22/2008	Annelida		Polychaeta			Pholoidae	Pholoe minuta	1	0.1	0.17	6

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N-2E21-G1-C	5/22/2008	Annelida		Polychaeta			Spionidae	Polydora websteri	3	0.1	0.17	18
Lotic	N-2E21-G1-C	5/22/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	5	0.1	0.17	29
Lotic	N10E11-G1-A	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	37	0.1	0.22	168
Lotic	N10E11-G1-A	5/20/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	3	0.1	0.22	14
Lotic	N10E11-G1-A	5/20/2008	Nematoda						Nematoda	5	0.1	0.22	23
Lotic	N10E11-G1-A	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	148	0.1	0.22	673
Lotic	N10E11-G1-A	5/20/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	25	0.1	0.22	114
Lotic	N10E11-G1-A	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	7	0.1	0.22	32
Lotic	N10E11-G1-A	5/20/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	2	0.1	0.22	9
Lotic	N10E11-G1-A	5/20/2008	Annelida		Polychaeta			Polynoidae	Polynoidae	1	0.1	0.22	5
Lotic	N10E11-G1-B	5/20/2008	Nematoda						Nematoda	8	0.1	0.14	57
Lotic	N10E11-G1-B	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	167	0.1	0.14	1193
Lotic	N10E11-G1-B	5/20/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	17	0.1	0.14	121
Lotic	N10E11-G1-B	5/20/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	3	0.1	0.14	21
Lotic	N10E11-G1-B	5/20/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	3	0.1	0.14	21
Lotic	N10E11-G1-B	5/20/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	8	0.1	0.14	57
Lotic	N10E11-G1-C	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	0.14	14
Lotic	N10E11-G1-C	5/20/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	1	0.1	0.14	7
Lotic	N10E11-G1-C	5/20/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.14	7
Lotic	N10E11-G1-C	5/20/2008	Nematoda						Nematoda	4	0.1	0.14	29
Lotic	N10E11-G1-C	5/20/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	182	0.1	0.14	1300
Lotic	N10E11-G1-C	5/20/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	4	0.1	0.14	29
Lotic	N10E11-G1-C	5/20/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	27	0.1	0.14	193
Lotic	N10E11-G1-C	5/20/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	5	0.1	0.14	36
Lotic	N-6E15-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	73	0.1	0.11	664
Lotic	N-6E15-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	2	0.1	0.11	18
Lotic	N-6E15-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella sp.	1	0.1	0.11	9
Lotic	N-6E15-G1-A	5/21/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.11	9
Lotic	N-6E15-G1-A	5/21/2008	Nemertea						Nemertea	1	0.1	0.11	9
Lotic	N-6E15-G1-A	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.11	18
Lotic	N-6E15-G1-A	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	125	0.1	0.11	1136
Lotic	N-6E15-G1-A	5/21/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	8	0.1	0.11	73
Lotic	N-6E15-G1-A	5/21/2008	Annelida		Polychaeta			Polynoidae	Harmothoe sp.	2	0.1	0.11	18
Lotic	N-6E15-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	95	0.1	0.11	864
Lotic	N-6E15-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	15	0.1	0.11	136
Lotic	N-6E15-G1-B	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	3	0.1	0.11	27
Lotic	N-6E15-G1-B	5/21/2008	Arthropoda	Crustaceae		Decapoda		Palaemonidae	Palaemonetes sp.	1	0.1	0.11	9
Lotic	N-6E15-G1-B	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	82	0.1	0.11	745
Lotic	N-6E15-G1-B	5/21/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	9	0.1	0.11	82
Lotic	N-6E15-G1-B	5/21/2008	Annelida		Polychaeta			Pholoidae	Phloe minuta	1	0.1	0.11	9
Lotic	N-6E15-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	110	0.1	0.25	440
Lotic	N-6E15-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	3	0.1	0.25	12
Lotic	N-6E15-G1-C	5/21/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.25	4
Lotic	N-6E15-G1-C	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	1	0.1	0.25	4

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N-6E15-G1-C	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	82	0.1	0.25	328
Lotic	N-6E15-G1-C	5/21/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	3	0.1	0.25	12
Lotic	LC-SW2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	2	0.1	0.28	7
Lotic	LC-SW2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	42	0.1	0.28	150
Lotic	LC-SW2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	10	0.1	0.28	36
Lotic	LC-SW2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	9	0.1	0.28	32
Lotic	LC-SW2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.28	7
Lotic	LC-SW2-G1-A	5/21/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	4	0.1	0.28	14
Lotic	LC-SW2-G1-A	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	149	0.1	0.28	532
Lotic	LC-SW2-G1-A	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	5	0.1	0.28	18
Lotic	LC-SW2-G1-A	5/21/2008	Annelida		Polychaeta			Pholoidae	Pholoe minuta	1	0.1	0.28	4
Lotic	LC-SW2-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.25	4
Lotic	LC-SW2-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	34	0.1	0.25	136
Lotic	LC-SW2-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	5	0.1	0.25	20
Lotic	LC-SW2-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	5	0.1	0.25	20
Lotic	LC-SW2-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	3	0.1	0.25	12
Lotic	LC-SW2-G1-B	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	162	0.1	0.25	648
Lotic	LC-SW2-G1-B	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	3	0.1	0.25	12
Lotic	LC-SW2-G1-B	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	2	0.1	0.25	8
Lotic	LC-SW2-G1-B	5/21/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.25	4
Lotic	LC-SW2-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.19	5
Lotic	LC-SW2-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus sp.	2	0.1	0.19	11
Lotic	LC-SW2-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	53	0.1	0.19	279
Lotic	LC-SW2-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	0.19	21
Lotic	LC-SW2-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	11	0.1	0.19	58
Lotic	LC-SW2-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.19	11
Lotic	LC-SW2-G1-C	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	145	0.1	0.19	763
Lotic	N-2E11-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	28	0.1	0.11	255
Lotic	N-2E11-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	22	0.1	0.11	200
Lotic	N-2E11-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	7	0.1	0.11	64
Lotic	N-2E11-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	18	0.1	0.11	164
Lotic	N-2E11-G1-A	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	10	0.1	0.11	91
Lotic	N-2E11-G1-A	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	127	0.1	0.11	1155
Lotic	N-2E11-G1-A	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	19	0.1	0.11	173
Lotic	N-2E11-G1-A	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	37	0.1	0.11	336
Lotic	N-2E11-G1-A	5/22/2008	Annelida		Polychaeta			Phyllodocidae	Mystides borealis	1	0.1	0.11	9
Lotic	N-2E11-G1-A	5/22/2008	Annelida		Polychaeta			Pholoidae	Pholoe minuta	1	0.1	0.11	9
Lotic	N-2E11-G1-A	5/22/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	3	0.1	0.11	27
Lotic	N-2E11-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus sp.	2	0.1	0.19	11
Lotic	N-2E11-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	20	0.1	0.19	105
Lotic	N-2E11-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	23	0.1	0.19	121
Lotic	N-2E11-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	19	0.1	0.19	100
Lotic	N-2E11-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	7	0.1	0.19	37
Lotic	N-2E11-G1-B	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.19	5



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Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N-2E11-G1-B	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	137	0.1	0.19	721
Lotic	N-2E11-G1-B	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	3	0.1	0.19	16
Lotic	N-2E11-G1-B	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	41	0.1	0.19	216
Lotic	N-2E11-G1-B	5/22/2008	Annelida		Polychaeta			Nereididae	Nereis sp.	1	0.1	0.19	5
Lotic	N-2E11-G1-B	5/22/2008	Annelida		Polychaeta			Pholoidae	Pholoe minuta	1	0.1	0.19	5
Lotic	N-2E11-G1-B	5/22/2008	Annelida		Polychaeta	Aciculata	Phyllodocida	Phyllodocidae	Phyllodoce sp.	1	0.1	0.19	5
Lotic	N-2E11-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus sp.	4	0.1	0.17	24
Lotic	N-2E11-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	32	0.1	0.17	188
Lotic	N-2E11-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	14	0.1	0.17	82
Lotic	N-2E11-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	20	0.1	0.17	118
Lotic	N-2E11-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	9	0.1	0.17	53
Lotic	N-2E11-G1-C	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	3	0.1	0.17	18
Lotic	N-2E11-G1-C	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	144	0.1	0.17	847
Lotic	N-2E11-G1-C	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	22	0.1	0.17	129
Lotic	N-2E11-G1-C	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	29	0.1	0.17	171
Lotic	N-3E28-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	33	0.1	0.17	194
Lotic	N-3E28-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	0.17	24
Lotic	N-3E28-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	9	0.1	0.17	53
Lotic	N-3E28-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	7	0.1	0.17	41
Lotic	N-3E28-G1-A	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.17	6
Lotic	N-3E28-G1-A	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.17	12
Lotic	N-3E28-G1-A	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	157	0.1	0.17	924
Lotic	N-3E28-G1-A	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.17	12
Lotic	N-3E28-G1-A	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	69	0.1	0.17	406
Lotic	N-3E28-G1-A	5/22/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.17	6
Lotic	N-3E28-G1-A	5/22/2008	Mollusca		Bivalvia	Mytiloidea		Mytilidae	Modiolus modiolus	7	0.1	0.17	41
Lotic	N-3E28-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	2	0.1	0.39	5
Lotic	N-3E28-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	42	0.1	0.39	108
Lotic	N-3E28-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	18	0.1	0.39	46
Lotic	N-3E28-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	14	0.1	0.39	36
Lotic	N-3E28-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	12	0.1	0.39	31
Lotic	N-3E28-G1-B	5/22/2008	Nemertea						Nemertea	1	0.1	0.39	3
Lotic	N-3E28-G1-B	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	6	0.1	0.39	15
Lotic	N-3E28-G1-B	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	92	0.1	0.39	236
Lotic	N-3E28-G1-B	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.39	5
Lotic	N-3E28-G1-B	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	49	0.1	0.39	126
Lotic	N-3E28-G1-B	5/22/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.39	3
Lotic	N-3E28-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	1	0.1	0.17	6
Lotic	N-3E28-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	27	0.1	0.17	159
Lotic	N-3E28-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	3	0.1	0.17	18
Lotic	N-3E28-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	17	0.1	0.17	100
Lotic	N-3E28-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	5	0.1	0.17	29
Lotic	N-3E28-G1-C	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.17	12
Lotic	N-3E28-G1-C	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	138	0.1	0.17	812

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Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N-3E28-G1-C	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.17	12
Lotic	N-3E28-G1-C	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	55	0.1	0.17	324
Lotic	N-1E15-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	2	0.1	0.22	9
Lotic	N-1E15-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	83	0.1	0.22	377
Lotic	N-1E15-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella pinguis	10	0.1	0.22	45
Lotic	N-1E15-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	6	0.1	0.22	27
Lotic	N-1E15-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	3	0.1	0.22	14
Lotic	N-1E15-G1-A	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	4	0.1	0.22	18
Lotic	N-1E15-G1-A	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.22	9
Lotic	N-1E15-G1-A	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea succica	85	0.1	0.22	386
Lotic	N-1E15-G1-A	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	8	0.1	0.22	36
Lotic	N-1E15-G1-A	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	47	0.1	0.22	214
Lotic	N-1E15-G1-A	5/22/2008	Annelida		Polychaeta			Pholoidae	Pholoe minuta	2	0.1	0.22	9
Lotic	N-1E15-G1B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus sp.	1	0.1	0.14	7
Lotic	N-1E15-G1B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	77	0.1	0.14	550
Lotic	N-1E15-G1B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella pinguis	12	0.1	0.14	86
Lotic	N-1E15-G1B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	7	0.1	0.14	50
Lotic	N-1E15-G1B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	3	0.1	0.14	21
Lotic	N-1E15-G1B	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	2	0.1	0.14	14
Lotic	N-1E15-G1B	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	0.14	14
Lotic	N-1E15-G1B	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea succica	72	0.1	0.14	514
Lotic	N-1E15-G1B	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	52	0.1	0.14	371
Lotic	N-1E15-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.19	5
Lotic	N-1E15-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	30	0.1	0.19	158
Lotic	N-1E15-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella pinguis	12	0.1	0.19	63
Lotic	N-1E15-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	7	0.1	0.19	37
Lotic	N-1E15-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	8	0.1	0.19	42
Lotic	N-1E15-G1-C	5/22/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	4	0.1	0.19	21
Lotic	N-1E15-G1-C	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	3	0.1	0.19	16
Lotic	N-1E15-G1-C	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea succica	121	0.1	0.19	637
Lotic	N-1E15-G1-C	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.19	11
Lotic	N-1E15-G1-C	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	31	0.1	0.19	163
Lotic	N-1E15-G1-C	5/22/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.19	5
Lotic	LC-HC1-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	0.47	4
Lotic	LC-HC1-G1-A	5/21/2008	Nematoda						Nematoda	48	0.1	0.47	102
Lotic	LC-HC1-G1-A	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea succica	154	0.1	0.47	328
Lotic	LC-HC1-G1-A	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	3	0.1	0.47	6
Lotic	LC-HC1-G1-A	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	2	0.1	0.47	4
Lotic	LC-HC1-G1-A	5/21/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	1	0.1	0.47	2
Lotic	LC-HC1-G1-B	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	0.69	3
Lotic	LC-HC1-G1-B	5/21/2008	Nematoda						Nematoda	32	0.1	0.69	46
Lotic	LC-HC1-G1-B	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea succica	171	0.1	0.69	248
Lotic	LC-HC1-G1-B	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.69	3
Lotic	LC-HC1-G1-B	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	1	0.1	0.69	1

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Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	LC-HC1-G1-B	5/21/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	2	0.1	0.69	3
Lotic	LC-HC1-G1-B	5/21/2008	Annelida		Polychaeta			Phyllodocidae	Eteone sp.	1	0.1	0.69	1
Lotic	LC-HC1-G1-B	5/21/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.69	1
Lotic	LC-HC1-G1-B	5/21/2008	Mollusca		Bivalvia	Mytiloidea		Tellinidae	Tellina sp.	2	0.1	0.69	3
Lotic	LC-HC1-G1-C	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	1	0.1	0.36	3
Lotic	LC-HC1-G1-C	5/21/2008	Nematoda					Nematoda		45	0.1	0.36	125
Lotic	LC-HC1-G1-C	5/21/2008	Nemertea					Nemertea		1	0.1	0.36	3
Lotic	LC-HC1-G1-C	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	162	0.1	0.36	450
Lotic	LC-HC1-G1-C	5/21/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.36	3
Lotic	LC-HC1-G1-C	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	1	0.1	0.36	3
Lotic	LC-HC1-G1-C	5/21/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	1	0.1	0.36	3
Lotic	LC-HC1-G1-C	5/21/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.36	3
Lotic	LC-HC1-G1-C	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	2	0.1	0.36	6
Lotic	LC-NE2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	1	0.1	1.00	1
Lotic	LC-NE2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	1.00	2
Lotic	LC-NE2-G1-A	5/21/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	1.00	1
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	3	0.1	1.00	3
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	35	0.1	1.00	35
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	1	0.1	1.00	1
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Spionidae	Polydora websteri	3	0.1	1.00	3
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Spionidae	Spionidae	2	0.1	1.00	2
Lotic	LC-NE2-G1-A	5/21/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	17	0.1	1.00	17
Lotic	NOE5-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella sp.	2	0.1	1.00	2
Lotic	NOE5-G1-A	5/22/2008	Arthropoda	Crustacea		Isopoda	Flabellifera	Limnoriidae	Limnoria lignorum	1	0.1	1.00	1
Lotic	NOE5-G1-A	5/22/2008	Nematoda					Nematoda		8	0.1	1.00	8
Lotic	NOE5-G1-A	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	85	0.1	1.00	85
Lotic	NOE5-G1-A	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	55	0.1	1.00	55
Lotic	NOE5-G1-A	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	39	0.1	1.00	39
Lotic	NOE5-G1-A	5/22/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	1	0.1	1.00	1
Lotic	NOE5-G1-A	5/22/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	3	0.1	1.00	3
Lotic	NOE5-G1-A	5/22/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	8	0.1	1.00	8
Lotic	NOE5-G1-A	5/22/2008	Mollusca		Gastropoda	Neotaenioglossa		Calyptaeidae	Crepidula plana	1	0.1	1.00	1
Lotic	NOE5-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	1	0.1	1.00	1
Lotic	NOE5-G1-B	5/22/2008	Nematoda					Nematoda		12	0.1	1.00	12
Lotic	NOE5-G1-B	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	25	0.1	1.00	25
Lotic	NOE5-G1-B	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	19	0.1	1.00	19
Lotic	NOE5-G1-B	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	17	0.1	1.00	17
Lotic	NOE5-G1-B	5/22/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	2	0.1	1.00	2
Lotic	NOE5-G1-B	5/22/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	1	0.1	1.00	1
Lotic	NOE5-G1-B	5/22/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	5	0.1	1.00	5
Lotic	NOE5-G1-B	5/22/2008	Mollusca		Bivalvia	Mytiloidea		Mytilidae	Modiolus modiolus	1	0.1	1.00	1
Lotic	NOE5-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	1.00	2
Lotic	NOE5-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella sp.	1	0.1	1.00	1
Lotic	NOE5-G1-C	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	18	0.1	1.00	18

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Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	NOE5-G1-C	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	6	0.1	1.00	6
Lotic	NOE5-G1-C	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	148	0.1	1.00	148
Lotic	NOE5-G1-C	5/22/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	1	0.1	1.00	1
Lotic	NOE5-G1-C	5/22/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	5	0.1	1.00	5
Lotic	NOE5-G1-C	5/22/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	7	0.1	1.00	7
Lotic	N11E33-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	28	0.1	0.08	350
Lotic	N11E33-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	5	0.1	0.08	63
Lotic	N11E33-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	44	0.1	0.08	550
Lotic	N11E33-G1-A	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.08	13
Lotic	N11E33-G1-A	5/27/2008	Nemertea		Anopla	Heteronemertea		Lineidae	Cerebratulus lacteus	1	0.1	0.08	13
Lotic	N11E33-G1-A	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	131	0.1	0.08	1638
Lotic	N11E33-G1-A	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	8	0.1	0.08	100
Lotic	N11E33-G1-A	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	22	0.1	0.08	275
Lotic	N11E33-G1-A	5/27/2008	Annelida		Polychaeta			Maldanidae	Nicomache lumbricalis	17	0.1	0.08	213
Lotic	N11E33-G1-A	5/27/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.08	13
Lotic	N11E33-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.11	9
Lotic	N11E33-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	39	0.1	0.11	355
Lotic	N11E33-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	8	0.1	0.11	73
Lotic	N11E33-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	11	0.1	0.11	100
Lotic	N11E33-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	37	0.1	0.11	336
Lotic	N11E33-G1-B	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	7	0.1	0.11	64
Lotic	N11E33-G1-B	5/27/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	1	0.1	0.11	9
Lotic	N11E33-G1-B	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	70	0.1	0.11	636
Lotic	N11E33-G1-B	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	4	0.1	0.11	36
Lotic	N11E33-G1-B	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	21	0.1	0.11	191
Lotic	N11E33-G1-B	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	5	0.1	0.11	45
Lotic	N11E33-G1-B	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	17	0.1	0.11	155
Lotic	N11E33-G1-B	5/27/2008	Annelida		Polychaeta			Spionidae	Prionospio steenstrupi	1	0.1	0.11	9
Lotic	N11E33-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	52	0.1	0.08	650
Lotic	N11E33-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	5	0.1	0.08	63
Lotic	N11E33-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	19	0.1	0.08	238
Lotic	N11E33-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	44	0.1	0.08	550
Lotic	N11E33-G1-C	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	2	0.1	0.08	25
Lotic	N11E33-G1-C	5/27/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	1	0.1	0.08	13
Lotic	N11E33-G1-C	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	83	0.1	0.08	1038
Lotic	N11E33-G1-C	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	3	0.1	0.08	38
Lotic	N11E33-G1-C	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	23	0.1	0.08	288
Lotic	N11E33-G1-C	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	4	0.1	0.08	50
Lotic	N12E19-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	82	0.1	0.14	586
Lotic	N12E19-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	0.14	29
Lotic	N12E19-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	3	0.1	0.14	21
Lotic	N12E19-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	22	0.1	0.14	157
Lotic	N12E19-G1-A	5/28/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	71	0.1	0.14	507
Lotic	N12E19-G1-A	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	21	0.1	0.14	150

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N12E19-G1-A	5/28/2008	Annelida		Polychaeta			Phyllodoctidae	Eteone sp.	1	0.1	0.14	7
Lotic	N12E19-G1-A	5/28/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	3	0.1	0.14	21
Lotic	N12E19-G1-A	5/28/2008	Annelida		Polychaeta			Spionidae	Prionospio steenstrupi	1	0.1	0.14	7
Lotic	N12E19-G1-B	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	51	0.1	0.08	638
Lotic	N12E19-G1-B	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	12	0.1	0.08	150
Lotic	N12E19-G1-B	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	7	0.1	0.08	88
Lotic	N12E19-G1-B	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	18	0.1	0.08	225
Lotic	N12E19-G1-B	5/28/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	69	0.1	0.08	863
Lotic	N12E19-G1-B	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	35	0.1	0.08	438
Lotic	N12E19-G1-B	5/28/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	12	0.1	0.08	150
Lotic	N12E19-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.08	13
Lotic	N12E19-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	66	0.1	0.08	825
Lotic	N12E19-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	5	0.1	0.08	63
Lotic	N12E19-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	18	0.1	0.08	225
Lotic	N12E19-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	22	0.1	0.08	275
Lotic	N12E19-G1-C	5/28/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	49	0.1	0.08	613
Lotic	N12E19-G1-C	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	39	0.1	0.08	488
Lotic	N12E19-G1-C	5/28/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	8	0.1	0.08	100
Lotic	N5E11-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus sp.	1	0.1	0.08	13
Lotic	N5E11-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	119	0.1	0.08	1488
Lotic	N5E11-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	9	0.1	0.08	113
Lotic	N5E11-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	18	0.1	0.08	225
Lotic	N5E11-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	4	0.1	0.08	50
Lotic	N5E11-G1-A	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	8	0.1	0.08	100
Lotic	N5E11-G1-A	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	54	0.1	0.08	675
Lotic	N5E11-G1-A	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	22	0.1	0.08	275
Lotic	N5E11-G1-A	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	6	0.1	0.08	75
Lotic	N5E11-G1-A	5/27/2008	Annelida		Polychaeta			Opheliidae	Ophelia sp.	1	0.1	0.08	13
Lotic	N5E11-G1-A	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	11	0.1	0.08	138
Lotic	N5E11-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	93	0.1	0.08	1163
Lotic	N5E11-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	5	0.1	0.08	63
Lotic	N5E11-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	3	0.1	0.08	38
Lotic	N5E11-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	0.08	13
Lotic	N5E11-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	53	0.1	0.08	663
Lotic	N5E11-G1-B	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	2	0.1	0.08	25
Lotic	N5E11-G1-B	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	44	0.1	0.08	550
Lotic	N5E11-G1-B	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.08	25
Lotic	N5E11-G1-B	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	26	0.1	0.08	325
Lotic	N5E11-G1-B	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	2	0.1	0.08	25
Lotic	N5E11-G1-B	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	14	0.1	0.08	175
Lotic	N5E11-G1-B	5/27/2008	Annelida		Polychaeta			Spionidae	Prionospio steenstrupi	1	0.1	0.08	13
Lotic	N5E11-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	78	0.1	0.08	975
Lotic	N5E11-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	5	0.1	0.08	63
Lotic	N5E11-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.08	25

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N5E11-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	27	0.1	0.08	338
Lotic	N5E11-G1-C	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	2	0.1	0.08	25
Lotic	N5E11-G1-C	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	48	0.1	0.08	600
Lotic	N5E11-G1-C	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.08	13
Lotic	N5E11-G1-C	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	37	0.1	0.08	463
Lotic	N5E11-G1-C	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulus sp.	8	0.1	0.08	100
Lotic	N5E11-G1-C	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	6	0.1	0.08	75
Lotic	N5E11-G1-C	5/27/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.08	13
Lotic	N5E2-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	4	0.1	0.17	24
Lotic	N5E2-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Dexaminidae	Dexamine thea	1	0.1	0.17	6
Lotic	N5E2-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	15	0.1	0.17	88
Lotic	N5E2-G1-A	5/28/2008	Nematoda						Nematoda	42	0.1	0.17	247
Lotic	N5E2-G1-A	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	196	0.1	0.17	1153
Lotic	N5E2-G1-A	5/28/2008	Annelida		Polychaeta			Nephtyidae	Nephtys incisa	1	0.1	0.17	6
Lotic	N5E2-G1-A	5/28/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	5	0.1	0.17	29
Lotic	N5E2-G1-B	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	1	0.1	0.89	1
Lotic	N5E2-G1-B	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	3	0.1	0.89	3
Lotic	N5E2-G1-B	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	209	0.1	0.89	235
Lotic	N5E2-G1-B	5/28/2008	Annelida		Polychaeta			Nephtyidae	Nephtys incisa	1	0.1	0.89	1
Lotic	N5E2-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	10	0.1	0.19	53
Lotic	N5E2-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	6	0.1	0.19	32
Lotic	N5E2-G1-C	5/28/2008	Nematoda						Nematoda	18	0.1	0.19	95
Lotic	N5E2-G1-C	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	215	0.1	0.19	1132
Lotic	N5E2-G1-C	5/28/2008	Annelida		Polychaeta			Nephtyidae	Nephtys incisa	1	0.1	0.19	5
Lotic	N5E2-G1-C	5/28/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	5	0.1	0.19	26
Lotic	N5E21-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	1	0.1	0.11	9
Lotic	N5E21-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	59	0.1	0.11	536
Lotic	N5E21-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	22	0.1	0.11	200
Lotic	N5E21-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	18	0.1	0.11	164
Lotic	N5E21-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	57	0.1	0.11	518
Lotic	N5E21-G1-A	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	8	0.1	0.11	73
Lotic	N5E21-G1-A	5/27/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	3	0.1	0.11	27
Lotic	N5E21-G1-A	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	103	0.1	0.11	936
Lotic	N5E21-G1-A	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.11	18
Lotic	N5E21-G1-A	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	24	0.1	0.11	218
Lotic	N5E21-G1-A	5/27/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	1	0.1	0.11	9
Lotic	N5E21-G1-A	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	9	0.1	0.11	82
Lotic	N5E21-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	27	0.1	0.33	82
Lotic	N5E21-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	15	0.1	0.33	45
Lotic	N5E21-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	6	0.1	0.33	18
Lotic	N5E21-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	7	0.1	0.33	21
Lotic	N5E21-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	32	0.1	0.33	97
Lotic	N5E21-G1-B	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	7	0.1	0.33	21
Lotic	N5E21-G1-B	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	97	0.1	0.33	294

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N5E21-G1-B	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	31	0.1	0.33	94
Lotic	N5E21-G1-B	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	4	0.1	0.33	12
Lotic	N5E21-G1-B	5/27/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	2	0.1	0.33	6
Lotic	N5E21-G1-B	5/27/2008	Annelida		Polychaeta			Capitellidae	Heteromastus filiformis	1	0.1	0.33	3
Lotic	N5E21-G1-B	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	5	0.1	0.33	15
Lotic	N5E21-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	45	0.1	0.25	180
Lotic	N5E21-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	32	0.1	0.25	128
Lotic	N5E21-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	15	0.1	0.25	60
Lotic	N5E21-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	0.25	4
Lotic	N5E21-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	19	0.1	0.25	76
Lotic	N5E21-G1-C	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	5	0.1	0.25	20
Lotic	N5E21-G1-C	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	88	0.1	0.25	352
Lotic	N5E21-G1-C	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.25	4
Lotic	N5E21-G1-C	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	15	0.1	0.25	60
Lotic	N5E21-G1-C	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	7	0.1	0.25	28
Lotic	N5E21-G1-C	5/27/2008	Annelida		Polychaeta			Arabellidae	Drilonereis magna	3	0.1	0.25	12
Lotic	N5E21-G1-C	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	3	0.1	0.25	12
Lotic	N6E15-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	28	0.1	0.08	350
Lotic	N6E15-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	1	0.1	0.08	13
Lotic	N6E15-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	5	0.1	0.08	63
Lotic	N6E15-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	33	0.1	0.08	413
Lotic	N6E15-G1-A	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	3	0.1	0.08	38
Lotic	N6E15-G1-A	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	91	0.1	0.08	1138
Lotic	N6E15-G1-A	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.08	25
Lotic	N6E15-G1-A	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	12	0.1	0.08	150
Lotic	N6E15-G1-A	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	1	0.1	0.08	13
Lotic	N6E15-G1-A	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	11	0.1	0.08	138
Lotic	N6E15-G1-A	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	22	0.1	0.08	275
Lotic	N6E15-G1-A	5/27/2008	Annelida		Polychaeta			Spionidae	Prionospio benedicti	2	0.1	0.08	25
Lotic	N6E15-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	37	0.1	0.08	463
Lotic	N6E15-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	8	0.1	0.08	100
Lotic	N6E15-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	4	0.1	0.08	50
Lotic	N6E15-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	48	0.1	0.08	600
Lotic	N6E15-G1-B	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.08	13
Lotic	N6E15-G1-B	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	87	0.1	0.08	1088
Lotic	N6E15-G1-B	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.08	13
Lotic	N6E15-G1-B	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	8	0.1	0.08	100
Lotic	N6E15-G1-B	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	4	0.1	0.08	50
Lotic	N6E15-G1-B	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	5	0.1	0.08	63
Lotic	N6E15-G1-B	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	17	0.1	0.08	213
Lotic	N6E15-G1-B	5/27/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.08	13
Lotic	N6E15-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	47	0.1	0.11	427
Lotic	N6E15-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	0.11	36
Lotic	N6E15-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	7	0.1	0.11	64

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N6E15-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.11	18
Lotic	N6E15-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	48	0.1	0.11	436
Lotic	N6E15-G1-C	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	2	0.1	0.11	18
Lotic	N6E15-G1-C	5/27/2008	Nemertea						Nemertea	2	0.1	0.11	18
Lotic	N6E15-G1-C	5/27/2008	Nemertea		Anopla	Heteronemertea		Lineidae	Cerebratulus lacteus	1	0.1	0.11	9
Lotic	N6E15-G1-C	5/27/2008	Arthropoda	Crustacea				Cumacea	Eudorella emarginata	2	0.1	0.11	18
Lotic	N6E15-G1-C	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	105	0.1	0.11	955
Lotic	N6E15-G1-C	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	5	0.1	0.11	45
Lotic	N6E15-G1-C	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	14	0.1	0.11	127
Lotic	N6E15-G1-C	5/27/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	2	0.1	0.11	18
Lotic	N6E15-G1-C	5/27/2008	Annelida		Polychaeta			Pholoidae	Pholoe minuta	1	0.1	0.11	9
Lotic	N6E15-G1-C	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	32	0.1	0.11	291
Lotic	N6E15-G1-C	5/27/2008	Annelida		Polychaeta			Spionidae	Prionospio benedicti	1	0.1	0.11	9
Lotic	N-7E0-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	1.00	1
Lotic	N-7E0-G1-A	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	8	0.1	1.00	8
Lotic	N-7E0-G1-A	5/22/2008	Nematoda						Nematoda	2	0.1	1.00	2
Lotic	N-7E0-G1-A	5/22/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	2	0.1	1.00	2
Lotic	N-7E0-G1-A	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	19	0.1	1.00	19
Lotic	N-7E0-G1-A	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	3	0.1	1.00	3
Lotic	N-7E0-G1-A	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	6	0.1	1.00	6
Lotic	N-7E0-G1-A	5/22/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	2	0.1	1.00	2
Lotic	N-7E0-G1-B	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	1	0.1	1.00	1
Lotic	N-7E0-G1-B	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	5	0.1	1.00	5
Lotic	N-7E0-G1-B	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	1.00	2
Lotic	N-7E0-G1-B	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	118	0.1	1.00	118
Lotic	N-7E0-G1-B	5/22/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	1	0.1	1.00	1
Lotic	N-7E0-G1-B	5/22/2008	Annelida		Polychaeta			Cirratulidae	Tharyx acutus	1	0.1	1.00	1
Lotic	N-7E0-G1-C	5/22/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	1.00	1
Lotic	N-7E0-G1-C	5/22/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	35	0.1	1.00	35
Lotic	N-7E0-G1-C	5/22/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	14	0.1	1.00	14
Lotic	N-7E0-G1-C	5/22/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	47	0.1	1.00	47
Lotic	N-7E0-G1-C	5/22/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	2	0.1	1.00	2
Lotic	N-7E0-G1-C	5/22/2008	Annelida		Polychaeta			Pholoidae	Pholoe minuta	1	0.1	1.00	1
Lotic	N-7E0-G1-C	5/22/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	1.00	1
Lotic	N-7E0-G1-C	5/22/2008	Mollusca		Gastropoda	Neotaenioglossa		Calyptaeidae	Crepidula sp.	3	0.1	1.00	3
Lotic	N-7E0-G1-C	5/22/2008	Mollusca		Gastropoda	Neotaenioglossa		Calyptaeidae	Crepidula fornicata	1	0.1	1.00	1
Lotic	N-7E0-G1-C	5/22/2008	Mollusca		Bivalvia	Mytiloidea		Mytilidae	Modiolus modiolus	1	0.1	1.00	1
Lotic	N-7E0-G1-C	5/22/2008	Mollusca		Bivalvia	Mytiloidea		Tellinidae	Tellina sp.	1	0.1	1.00	1
Lotic	N7E7-G1-A	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	1	0.1	0.14	7
Lotic	N7E7-G1-A	5/28/2008	Nematoda						Nematoda	62	0.1	0.14	443
Lotic	N7E7-G1-A	5/28/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.14	7
Lotic	N7E7-G1-A	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	155	0.1	0.14	1107
Lotic	N7E7-G1-A	5/28/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	1	0.1	0.14	7
Lotic	N7E7-G1-A	5/28/2008	Annelida		Polychaeta			Orbiniidae	Naineris quadricuspida	1	0.1	0.14	7



**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N7E7-G1-A	5/28/2008	Mollusca		Gastropoda	Neotaenioglossa		Calyptraeidae	Crepidula fornicata	1	0.1	0.14	7
Lotic	N7E7-G1-B	5/28/2008	Nematoda						Nematoda	82	0.1	0.08	1025
Lotic	N7E7-G1-B	5/28/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.08	13
Lotic	N7E7-G1-B	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	160	0.1	0.08	2000
Lotic	N7E7-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Melpidippidae	Casco bigelowi	1	0.1	0.14	7
Lotic	N7E7-G1-C	5/28/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	0.14	14
Lotic	N7E7-G1-C	5/28/2008	Nematoda						Nematoda	77	0.1	0.14	550
Lotic	N7E7-G1-C	5/28/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	152	0.1	0.14	1086
Lotic	N7E7-G1-C	5/28/2008	Annelida		Polychaeta			Cirratulidae	Cirratulidae	1	0.1	0.14	7
Lotic	N8E24-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	57	0.1	0.11	518
Lotic	N8E24-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	11	0.1	0.11	100
Lotic	N8E24-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	3	0.1	0.11	27
Lotic	N8E24-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	0.11	9
Lotic	N8E24-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	41	0.1	0.11	373
Lotic	N8E24-G1-A	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	77	0.1	0.11	700
Lotic	N8E24-G1-A	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	8	0.1	0.11	73
Lotic	N8E24-G1-A	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	5	0.1	0.11	45
Lotic	N8E24-G1-A	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	7	0.1	0.11	64
Lotic	N8E24-G1-A	5/27/2008	Annelida		Polychaeta	Aciculata	Phyllodocida	Phyllodocidae	Phyllodoce sp.	2	0.1	0.11	18
Lotic	N8E24-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	52	0.1	0.08	650
Lotic	N8E24-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	0.08	50
Lotic	N8E24-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	6	0.1	0.08	75
Lotic	N8E24-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	63	0.1	0.08	788
Lotic	N8E24-G1-B	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.08	13
Lotic	N8E24-G1-B	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	62	0.1	0.08	775
Lotic	N8E24-G1-B	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	5	0.1	0.08	63
Lotic	N8E24-G1-B	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	12	0.1	0.08	150
Lotic	N8E24-G1-B	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	4	0.1	0.08	50
Lotic	N8E24-G1-B	5/27/2008	Annelida		Polychaeta			Spionidae	Prionospio steenstrupi	2	0.1	0.08	25
Lotic	N8E24-G1-B	5/27/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	2	0.1	0.08	25
Lotic	N8E24-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	55	0.1	0.14	393
Lotic	N8E24-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	4	0.1	0.14	29
Lotic	N8E24-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	8	0.1	0.14	57
Lotic	N8E24-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	1	0.1	0.14	7
Lotic	N8E24-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	54	0.1	0.14	386
Lotic	N8E24-G1-C	5/27/2008	Arthropoda	Crustacea		Isopoda	Valvifera	Idoteidae	Edotea sp.	1	0.1	0.14	7
Lotic	N8E24-G1-C	5/27/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	1	0.1	0.14	7
Lotic	N8E24-G1-C	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	70	0.1	0.14	500
Lotic	N8E24-G1-C	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.14	7
Lotic	N8E24-G1-C	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	2	0.1	0.14	14
Lotic	N8E24-G1-C	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	3	0.1	0.14	21
Lotic	N8E24-G1-C	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	2	0.1	0.14	14
Lotic	N8E24-G1-C	5/27/2008	Annelida		Polychaeta			Spionidae	Prionospio steenstrupi	2	0.1	0.14	14
Lotic	N8E24-G1-C	5/27/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	2	0.1	0.14	14

**Attachment A - Benthic Macroinvertebrate Community Data**

Lab	SID	Collection Date	Phylum	Subphylum	Class	Order	Suborder	Family	Taxon Identified	Organism Count	Sampling Area (m <sup>2</sup> )	Fraction of Area Counted	Organisms Density (Organism/Sample)
Lotic	N3E31-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	14	0.1	0.06	233
Lotic	N3E31-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	12	0.1	0.06	200
Lotic	N3E31-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	7	0.1	0.06	117
Lotic	N3E31-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.06	33
Lotic	N3E31-G1-A	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	19	0.1	0.06	317
Lotic	N3E31-G1-A	5/27/2008							Nemertea	1	0.1	0.06	17
Lotic	N3E31-G1-A	5/27/2008	Arthropoda	Crustacea		Cumacea		Leuconidae	Eudorella emarginata	3	0.1	0.06	50
Lotic	N3E31-G1-A	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	76	0.1	0.06	1267
Lotic	N3E31-G1-A	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	7	0.1	0.06	117
Lotic	N3E31-G1-A	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	59	0.1	0.06	983
Lotic	N3E31-G1-A	5/27/2008	Annelida		Polychaeta			Maldanidae	Maldanidae	4	0.1	0.06	67
Lotic	N3E31-G1-A	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	8	0.1	0.06	133
Lotic	N3E31-G1-A	5/27/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	2	0.1	0.06	33
Lotic	N3E31-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	2	0.1	0.08	25
Lotic	N3E31-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Lysianassidae	Orchomenella minuta	5	0.1	0.08	63
Lotic	N3E31-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	6	0.1	0.08	75
Lotic	N3E31-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	3	0.1	0.08	38
Lotic	N3E31-G1-B	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	12	0.1	0.08	150
Lotic	N3E31-G1-B	5/27/2008	Nemertea		Anopla	Heteronemertea		Lineidae	Cerebratulus lacteus	1	0.1	0.08	13
Lotic	N3E31-G1-B	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	132	0.1	0.08	1650
Lotic	N3E31-G1-B	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	1	0.1	0.08	13
Lotic	N3E31-G1-B	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	71	0.1	0.08	888
Lotic	N3E31-G1-B	5/27/2008	Annelida		Polychaeta			Orbiniidae	Scoloplos sp.	1	0.1	0.08	13
Lotic	N3E31-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Corophiidae	Corophium sp.	1	0.1	0.11	9
Lotic	N3E31-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Leptocheirus pinguis	18	0.1	0.11	164
Lotic	N3E31-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Photidae	Photis sp.	2	0.1	0.11	18
Lotic	N3E31-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Phoxocephalidae	Phoxocephalus holbolli	2	0.1	0.11	18
Lotic	N3E31-G1-C	5/27/2008	Arthropoda	Crustacea		Amphipoda	Gammaridea	Aoridae	Rudilemboides sp.	1	0.1	0.11	9
Lotic	N3E31-G1-C	5/27/2008	Annelida		Polychaeta			Paraonidae	Aricidea suecica	129	0.1	0.11	1173
Lotic	N3E31-G1-C	5/27/2008	Annelida		Polychaeta			Arabellidae	Arabella iricolor	2	0.1	0.11	18
Lotic	N3E31-G1-C	5/27/2008	Annelida		Polychaeta			Capitellidae	Capitella capitata	68	0.1	0.11	618
Lotic	N3E31-G1-C	5/27/2008	Annelida		Polychaeta			Spionidae	Polydora sp.	1	0.1	0.11	9