



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Classification Attainment Report

Station Information

Station Number: S-867
Waterbody: East Outlet Stream - Station 867
Town: Lyman
Directions: GO TO END OF DAVIS RD.; FOLLOW LORD'S BROOK
DOWNSTREAM TO CONFLUENCE
DEP Drainage: Piscataqua - Presumpscot - Saco
HUC8: 01060003
HUC8 Name: Piscataqua - Salmon Falls
Latitude: 43 29 55.93 N
Longitude: 70 37 10.3 W
Stream Order: 2

Sample Information

Log Number: 1710
Subsample Factor: X1
Type of Sample: ROCK BAG
Replicates: 3
Date Deployed: 7/11/2008
Date Retrieved: 8/8/2008

Classification Attainment

Statutory Class: B
Model Result with P>.6: A
Date Last Calculated: 3/18/2009
Final Determination: A
Reason for Determination: Model
Comments:

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.81	Class A, B, or C	1.00
Class B	0.18	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.92
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.08

Model Variables

01 Total Mean Abundance	186.00	18 Relative Abundance Ephemeroptera	0.01
02 Generic Richness	42.00	19 EPT Generic Richness	17.00
03 Plecoptera Mean Abundance	11.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	8.00
04 Ephemeroptera Mean Abundance	1.67	23 Relative Generic Richness- Plecoptera	0.05
05 Shannon-Wiener Generic Diversity	3.34	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	1.48
06 Hilsenhoff Biotic Index	3.89	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	1.67
07 Relative Abundance - Chironomidae	0.16	28 EP Generic Richness/14	0.21
08 Relative Generic Richness Diptera	0.38	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	6.86		
11 <i>Cheumatopsyche</i> Abundance	1.14		
12 EPT Generic Richness/ Diptera Generic Richness	1.06		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	4.67		
17 Chironomini Abundance (Family Functional Group)	15.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Simulium</i>	47.85
2	<i>Polypedilum</i>	7.71
3	<i>Leuctra</i>	5.73
4	<i>Pycnopsyche</i>	3.94
5	<i>Hydropsyche</i>	3.69



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Classification Attainment Report

Station Number: S-867

Town: Lyman

Date Deployed: 7/11/2008

Log Number: 1710

Waterbody: East Outlet Stream - Station 867

Date Retrieved: 8/8/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: LOTIC INC.

Waterbody Information - Deployment

Temperature: 17 deg C
Dissolved Oxygen: 8.3 mg/l
Specific Conductance: 33 uS/cm
Velocity: 7 cm/s
pH: 6.03
Wetted Width: 2.1 m
Bankfull Width: 3 m
Depth: 20 cm

Waterbody Information - Retrieval

Temperature: 17.2 deg C
Dissolved Oxygen: 8.6 mg/l
Specific Conductance: 42 uS/cm
Velocity: 56 cm/s
pH: 4.24
Wetted Width: 3 m
Bankfull Width: 3 m
Depth: 75 cm

Water Chemistry - Retrieval

Summary of Habitat Characteristics

Landuse Name

Canopy Cover

Terrain

Upland Hardwood

Canopy Dense

Rolling Terrain

Stressor

Location

Substrate

Boulder 5 %
Gravel 25 %
Rubble/Cobble 20 %
Sand 45 %
Silt 5 %

Landcover Summary - 2004 Data

Sample Comments

HIGH WATER LEVEL AT PICK-UP; DARK WATER



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-867

Waterbody: East Outlet Stream - Station 867

Town: Lyman

Log Number: 1710

Subsample Factor: X1

Replicates: 3

Calculated: 3/18/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Lumbriculus</i>	08020101002	0.67	0.67		CG	0.4	0.4
<i>Helobdella</i>	08030101005		1.33		--		0.7
<i>Helobdella stagnalis</i>	08030101005004	1.33			--	0.7	
Nemouridae	09020201	0.33	0.33		--	0.2	0.2
<i>Leuctra</i>	09020204020	10.67	10.67	0	SH	5.7	5.7
<i>Boyeria</i>	09020301004	3.33	3.67	2	PR	1.8	2.0
<i>Boyeria vinosa</i>	09020301004012	0.33			--	0.2	
<i>Lanthus</i>	09020302014	0.67	0.67		PR	0.4	0.4
<i>Maccaffertium</i>	09020402015	1.67	1.67	4	SC	0.9	0.9
<i>Dolophilodes</i>	09020601001	0.67	0.67	0	CF	0.4	0.4
<i>Cynnellus</i>	09020603007	0.33	0.33	8	CF	0.2	0.2
<i>Nyctiophylax</i>	09020603009	4.33	4.33	5	PR	2.3	2.3
<i>Polycentropus</i>	09020603010	1.00	1.00	6	PR	0.5	0.5
<i>Phylocentropus</i>	09020603011	1.33	1.33	5	CF	0.7	0.7
Hydropsychidae	09020604	1.00			--	0.5	
<i>Cheumatopsyche</i>	09020604015	1.00	1.14	5	CF	0.5	0.6
<i>Hydropsyche</i>	09020604016	6.00	6.86	4	CF	3.2	3.7
Phryganeidae	09020608	0.33	0.33		--	0.2	0.2
<i>Micrasema</i>	09020609044	0.33	0.33	2	SH	0.2	0.2
<i>Pycnopsyche</i>	09020610049	7.33	7.33	4	SH	3.9	3.9
<i>Limnephilus</i>	09020610055	1.00	1.00	3	SH	0.5	0.5
<i>Lepidostoma</i>	09020611064	0.33	0.33	1	SH	0.2	0.2
<i>Psilotreta</i>	09020614068	3.33	3.33	0	SC	1.8	1.8
<i>Molanna</i>	09020615069	2.67	2.67	6	SC	1.4	1.4
<i>Nigronia</i>	09020701003	3.00	3.00	0	PR	1.6	1.6
<i>Sialis</i>	09020702004	2.67	2.67	4	PR	1.4	1.4
Tipulidae	09021001	1.00	1.00		--	0.5	0.5
<i>Hexatoma</i>	09021001008	0.33	0.33	2	PR	0.2	0.2
<i>Bezzia/palpomyia</i>	09021010043	0.33	0.33	6	PR	0.2	0.2
<i>Larsia</i>	09021011009	0.33	0.33	6	PR	0.2	0.2
<i>Natarsia</i>	09021011011	1.00	1.00	8	PR	0.5	0.5
<i>Thienemannimyia</i>	09021011020		3.33	3	PR		1.8
<i>Thienemannimyia/arctopelopia</i> group	09021011020041	3.33			--	1.8	
<i>Eukiefferiella</i>	09021011041	0.33	0.33	8	CG	0.2	0.2
<i>Parametriocnemus</i>	09021011053	0.67	0.67	5	CG	0.4	0.4
<i>Tvetenia</i>	09021011065		1.33	5	CG		0.7
<i>Tvetenia paucunca</i>	09021011065114	1.33			--	0.7	



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-867	Waterbody: East Outlet Stream - Station 867	Town: Lyman
Log Number: 1710	Subsample Factor: X1	Replicates: 3
		Calculated: 3/18/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Micropsectra</i>	09021011070	6.67	6.67	7	CG	3.6	3.6
<i>Rheotanytarsus</i>	09021011072	0.67	0.67	6	CF	0.4	0.4
<i>Tanytarsus</i>	09021011076	0.33	0.33	6	CF	0.2	0.2
<i>Microtendipes</i>	09021011094		1.33	6	CF		0.7
<i>Microtendipes rydalensis-grp.</i>	09021011094168	1.33			--	0.7	
<i>Polypedilum</i>	09021011102		14.33	6	SH		7.7
<i>Polypedilum aviceps</i>	09021011102181	12.33			--	6.6	
<i>Polypedilum flavum</i>	09021011102182	0.33			--	0.2	
<i>Polypedilum illinoense-grp.</i>	09021011102185	1.67			--	0.9	
<i>Simulium</i>	09021012047	89.00	89.00	4	CF	47.8	47.8
<i>Atherix</i>	09021015055	6.67	6.67	2	PR	3.6	3.6
Coleoptera	090211	0.33	0.33		--	0.2	0.2
<i>Ectopria</i>	09021109059	0.33	0.33	5	SC	0.2	0.2
<i>Promoresia</i>	09021113069	1.67	1.67		--	0.9	0.9
Sphaeriidae	10020201	0.33	0.33		CF	0.2	0.2