



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

Station Information

Station Number: S-170
Waterbody: Sabattus River - Station 170
Town: Lisbon
Directions: BELOW MAINE ELECTRONICS, 40 M BELOW DAM

DEP Drainage: Androscoggin
HUC8: 01040002
HUC8 Name: Lower Androscoggin
Latitude: 44 1 56.52 N
Longitude: 70 6 11.98 W
Stream Order: 3

Sample Information

Log Number: 2202
Subsample Factor: X1
Type of Sample: ROCK BASKET
Replicates: 3
Date Deployed: 7/18/2013
Date Retrieved: 8/15/2013

Classification Attainment

Statutory Class: B
Model Result with P>.6: I
Date Last Calculated: 11/18/2013
Final Determination: I
Reason for Determination: Best Professional Judgement
Comments: Minimum Provision for Generic Richness not met. Poor Retrieval.

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.00	Class A, B, or C	0.92
Class B	0.02	Non-Attainment	0.08
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.00	Class A	0.00
Class C or Non-Attainment	1.00	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Mean Abundance	109.33	18 Relative Abundance Ephemeroptera	0.28
02 Generic Richness	12.00	19 EPT Generic Richness	5.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	31.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.47	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	26.53
06 Hilsenhoff Biotic Index	4.28	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	9.00
07 Relative Abundance - Chironomidae	0.02	28 EP Generic Richness/14	0.21
08 Relative Generic Richness Diptera	0.50	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	14.47		
11 <i>Cheumatopsyche</i> Abundance	26.53		
12 EPT Generic Richness/ Diptera	0.83		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family	0.00		
Functional Group)			
16 Tanypodinae Mean Abundance	0.33		
(Family Functional Group)			
17 Chironomini Abundance (Family	1.33		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Simulium</i>	30.18
2	<i>Cheumatopsyche</i>	24.26
3	<i>Baetis</i>	19.82
4	<i>Hydropsyche</i>	13.24
5	<i>Maccaffertium</i>	8.23



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

Station Number: S-170	Town: Lisbon	Date Deployed: 7/18/2013
Log Number: 2202	Waterbody: Sabattus River - Station 170	Date Retrieved: 8/15/2013

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	27 deg C
Dissolved Oxygen:	7.3 mg/l
Specific Conductance:	145 uS/cm
Velocity:	67.3 cm/s
pH:	6.9
Wetted Width:	26 m
Bankfull Width:	26 m
Depth:	65 cm

Waterbody Information - Retrieval

Temperature:	21.4 deg C
Dissolved Oxygen:	7.6 mg/l
Specific Conductance:	85 uS/cm
Velocity:	115.5 cm/s
pH:	7.21
Wetted Width:	26 m
Bankfull Width:	26 m
Depth:	80 cm

Water Chemistry - 8/15/2013

Ammonia As Nitrogen	<0.01 mg/l	Soluble Reactive Phosphorus	2 ug/l
Nitrate+nitrite As N	0.02 mg/l	Total Phosphorus	0.074 mg/l
Total Kjeldahl Nitrogen	0.8 mg/l	Total Suspended Solids	20 mg/l
Dissolved Organic Carbon	3.4 mg/l	Total Dissolved Solids	80 mg/l

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Open	Rolling
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Altered Hydrology	Above Road Crossing	Bedrock 25 %
Impounded	Below Dam	Boulder 20 %
Metals	Below Urban NPS	Gravel 5 %
Urban Runoff		Rubble/Cobble 40 %
		Silt 10 %

Landcover Summary - 2004 Data

Sample Comments

7/18/2013-SEWAGE ODOR, CLOUDY GREEN COLORING
8/15/2013-HIGH WATER LEVELS, POOR RETRIEVAL, DISTURBED



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

Station Number: S-170

Waterbody: Sabattus River - Station 170

Town: Lisbon

Log Number: 2202

Subsample Factor: X1

Replicates: 3

Calculated: 11/18/2013

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Turbellaria	0301	1.00	1.00		--	0.9	0.9
<i>Girardia</i>	03010102002		0.33		--		0.3
<i>Girardia tigrina</i>	03010102002001	0.33			--	0.3	
<i>Baetis</i>	09020401001	1.67	21.67	4	CG	1.5	19.8
<i>Baetis flavistriga</i>	09020401001004	4.67			--	4.3	
<i>Baetis intercalaris</i>	09020401001008	14.67			--	13.4	
<i>Baetis pluto</i>	09020401001009	0.67			--	0.6	
Heptageniidae	09020402	0.33	0.33		--	0.3	0.3
<i>Maccaffertium</i>	09020402015	3.33	9.00	4	SC	3.0	8.2
<i>Maccaffertium exiguum</i>	09020402015046	0.33			--	0.3	
<i>Maccaffertium modestum</i>	09020402015051	5.33			--	4.9	
Hydropsychidae	09020604	1.33			--	1.2	
<i>Cheumatopsyche</i>	09020604015	25.67	26.53	5	CF	23.5	24.3
<i>Hydropsyche</i>	09020604016	10.33	14.47	4	CF	9.5	13.2
<i>Hydropsyche morosa</i>	09020604016030	0.67			--	0.6	
<i>Hydropsyche depravata complex</i>	09020604016041	3.00			CF	2.7	
<i>Dicranota</i>	09021001005	0.33	0.33	3	PR	0.3	0.3
<i>Meropelopia</i>	09021011010	0.33	0.33		--	0.3	0.3
<i>Cardiocladius</i>	09021011034		0.67	5	PR		0.6
<i>Cardiocladius obscurus</i>	09021011034053	0.67			--	0.6	
<i>Rheotanytarsus</i>	09021011072	0.33	0.33	6	CF	0.3	0.3
<i>Polypedilum</i>	09021011102		1.33	6	SH		1.2
<i>Polypedilum aviceps</i>	09021011102181	0.33			--	0.3	
<i>Polypedilum flavum</i>	09021011102182	1.00			--	0.9	
<i>Simulium</i>	09021012047	2.67	33.00	4	CF	2.4	30.2
<i>Simulium fibrinflatum</i>	09021012047059	2.00			--	1.8	
<i>Simulium jenningsi</i>	09021012047060	0.33			--	0.3	
<i>Simulium vittatum</i>	09021012047064	12.33			--	11.3	
<i>Simulium decorum</i>	09021012047065	3.33			--	3.0	
<i>Simulium jenningsi complex</i>	09021012047070	12.00			CF	11.0	
<i>Simulium venustum/verecundum complex</i>	09021012047072	0.33			CF	0.3	