



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

Station Information

Station Number: S-629
Waterbody: Sabattus River - Station 629
Town: Sabattus
Directions: 35 M DOWNSTREAM OF RT 126 BRIDGE, SABATTUS POND OUTLET

DEP Drainage: Androscoggin
HUC8 Name: Lower Androscoggin
Latitude: 44 6 46.62 N
Longitude: 70 6 27.47 W
Stream Order: 3

Sample Information

Log Number: 2204
Subsample Factor: X1
Type of Sample: ROCK BAG
Replicates: 3
Date Deployed: 7/18/2013
Date Retrieved: 8/15/2013

Classification Attainment

Statutory Class: C
Model Result with P>.6: C
Date Last Calculated: 1/29/2014
Final Determination: C
Reason for Determination: Model
Comments:

Date: 1/30/2014

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.00	Class A, B, or C	1.00
Class B	0.01	Non-Attainment	0.00
B or Better Model		A Model	
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	552.00	18 Relative Abundance Ephemeroptera	0.25
02 Generic Richness	21.00	19 EPT Generic Richness	6.00
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	140.67	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.61	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	222.67
06 Hilsenhoff Biotic Index	4.65	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	121.67
07 Relative Abundance - Chironomidae	0.08	28 EP Generic Richness/14	0.21
08 Relative Generic Richness Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	87.00		
11 <i>Cheumatopsyche</i> Abundance	221.67		
12 EPT Generic Richness/ Diptera Generic Richness	0.86		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.33		
17 Chironomini Abundance (Family Functional Group)	13.00		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Cheumatopsyche</i>	40.16
2	<i>Maccaffertium</i>	22.04
3	<i>Hydropsyche</i>	15.76
4	<i>Rheotanytarsus</i>	5.56
5	<i>Simulium</i>	3.26



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: LOTIC INC.

Waterbody Information - Deployment

Temperature:	27.1 deg C
Dissolved Oxygen:	7 mg/l
Specific Conductance:	88 uS/cm
Velocity:	43.4 cm/s
pH:	6.8
Wetted Width:	13 m
Bankfull Width:	16 m
Depth:	48 cm

Waterbody Information - Retrieval

Temperature:	23 deg C
Dissolved Oxygen:	8.9 mg/l
Specific Conductance:	69 uS/cm
Velocity:	55.5 cm/s
pH:	8
Wetted Width:	16 m
Bankfull Width:	16 m
Depth:	85 cm

Water Chemistry - 8/15/2013

Ammonia As Nitrogen	<0.01 mg/l	Soluble Reactive Phosphorus	1 ug/l
Nitrate+nitrite As N	<0.01 mg/l	Total Phosphorus	0.071 mg/l
Total Kjeldahl Nitrogen	0.9 mg/l	Total Suspended Solids	17 mg/l
Dissolved Organic Carbon	2.8 mg/l	Total Dissolved Solids	67 mg/l

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Conifer	Open	Rolling
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Agricultural Runoff	Below Agriculture NPS	Bedrock 5 %
Lake Outlet	Below Road Crossing	Boulder 5 %
Nutrients	Lake Outlet	Detritus 5 %
		Gravel 15 %
		Rubble/Cobble 10 %
		Sand 55 %
		Silt 5 %

Landcover Summary - 2004 Data

Total Area (ac)	21163	High Int. Dev. %	0.3	Water %	9.5	Non-vegetated %	1.3
		Med Int. Dev. %	0.7	Wetland %	7.6	Tilled Agriculture %	2.6
		Low Int. Dev. %	4.7	Upland Woody %	60.5	Grassland %	11.6
		Development %	5.7	Natural %	68.2	Human Altered %	22.3
						Impervious %	4.8

Sample Comments

7/18/2013- CRAYFISH, TADPOLES OBSERVED - GREEN AND ODOROUS



Maine Department of Environmental Protection
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Aquatic Life Taxonomic Inventory Report

Station Number: S-629

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Town: Sabattus

Log Number: 2204

Subsample Factor: X1

Replicates: 3

Calculated: 1/29/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Limnodrilus</i>	08020202022	0.33	0.33		CG	0.1	0.1
<i>Erpobdella</i>	08030203002		1.33		--		0.2
<i>Erpobdella punctata</i>	08030203002001	1.33			--	0.2	
<i>Caecidotea</i>	09010101001	10.33	10.33	8	SH	1.9	1.9
<i>Argia</i>	09020309048	9.00	9.00	7	PR	1.6	1.6
<i>Baetis</i>	09020401001		4.33	4	CG		0.8
<i>Baetis flavistriga</i>	09020401001004	4.33			--	0.8	
<i>Maccaffertium</i>	09020402015		121.67	4	SC		22.0
<i>Maccaffertium modestum</i>	09020402015051	121.67			--	22.0	
<i>Ephemerella</i>	09020410035	14.67	14.67	1	CG	2.7	2.7
<i>Cheumatopsyche</i>	09020604015	221.67	221.67	5	CF	40.2	40.2
<i>Hydropsyche</i>	09020604016		87.00	4	CF		15.8
<i>Hydropsyche morosa</i>	09020604016030	55.67			--	10.1	
<i>Hydropsyche sparna</i>	09020604016032	31.33			--	5.7	
<i>Hydatophylax</i>	09020610048	0.33	0.33	2	SH	0.1	0.1
<i>Thienemannimyia</i>	09021011020		1.33	3	PR		0.2
<i>Thienemannimyia/arctopelopia</i> group	09021011020041	1.33			--	0.2	
<i>Cricotopus</i>	09021011037		1.00	7	SH		0.2
<i>Cricotopus sylvestris</i> group	09021011037079	1.00			SH	0.2	
<i>Rheotanytarsus</i>	09021011072	30.67	30.67	6	CF	5.6	5.6
<i>Endochironomus</i>	09021011087	0.33	0.33	10	SH	0.1	0.1
<i>Glyptotendipes</i>	09021011088	1.67	1.67	10	SH	0.3	0.3
<i>Polypedilum</i>	09021011102		11.00	6	SH		2.0
<i>Polypedilum aviceps</i>	09021011102181	11.00			--	2.0	
<i>Simulium</i>	09021012047	18.00	18.00	4	CF	3.3	3.3
<i>Psephenus</i>	09021108058		0.33	4	SC		0.1
<i>Psephenus herricki</i>	09021108058028	0.33			--	0.1	
<i>Stenelmis</i>	09021113070	16.00	16.00	5	SC	2.9	2.9
<i>Campeloma</i>	10010102004		0.67		SC		0.1
<i>Campeloma decisum</i>	10010102004009	0.67			--	0.1	
<i>Sphaerium</i>	10020201003	0.33	0.33		CF	0.1	0.1