



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

Station Information

Station Number: S-1001
Waterbody: Little Androscoggin River - Station 1001
Town: Oxford
Directions: 427 MAIN STREET (ROUTE 26)
River Basin: Androscoggin
HUC8 Name: Lower Androscoggin
Latitude: 44 7 57.65 N
Longitude: 70 27 38.09 W
Stream Order: 4

Sample Information

Log Number: 2206 Type of Sample: ROCK BAG Date Deployed: 7/16/2013
Subsample Factor: X10 Replicates: 3 Date Retrieved: 8/19/2013

Classification Attainment

Statutory Class: C **Final Determination: C** Date: 5/1/2014
Model Result with $P \geq 0.6$: C **Reason for Determination: Model**
Date Last Calculated: 4/30/2014 Comments: Indeterminate Class B (.42) not raised to Class B based on the proportion of sensitive taxa in the community.

Model Probabilities

First Stage Model			C or Better Model		
Class A	0.03	Class C	0.40	Class A, B, or C	1.00
Class B	0.57	NA	0.00	Non-Attainment	0.00
B or Better Model			A Model		
Class A or B		0.42	Class A		0.03
Class C or Non-Attainment		0.58	Class B or C or Non-Attainment		0.97

Model Variables

01 Total Mean Abundance	6516.67	18 Relative Abundance Ephemeroptera	0.03
02 Generic Richness	44.00	19 EPT Generic Richness	17.00
03 Plecoptera Mean Abundance	23.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	180.00	23 Relative Generic Richness- Plecoptera	0.07
05 Shannon-Wiener Generic Diversity	3.25	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	1226.41
06 Hilsenhoff Biotic Index	3.98	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	13.33
07 Relative Abundance - Chironomidae	0.16	28 EP Generic Richness/14	0.64
08 Relative Generic Richness Diptera	0.30	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	1485.62		
11 <i>Cheumatopsyche</i> Abundance	1226.41		
12 EPT Generic Richness/ Diptera Generic Richness	1.31		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	16.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	10.03		
17 Chironomini Abundance (Family Functional Group)	103.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	22.80
2	<i>Cheumatopsyche</i>	18.82
3	<i>Chimarra</i>	15.65
4	<i>Macrostemum</i>	14.19
5	<i>Rheotanytarsus</i>	7.80



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	24.8 deg C
Dissolved Oxygen:	8 mg/l
Specific Conductance:	55 uS/cm
Velocity:	153.6 cm/s
pH:	6.32
Wetted Width:	24 m
Bankfull Width:	24 m
Depth:	63 cm

Waterbody Information - Retrieval

Temperature:	22.2 deg C
Dissolved Oxygen:	7.5 mg/l
Specific Conductance:	47 uS/cm
Velocity:	163 cm/s
pH:	5.83
Wetted Width:	24 m
Bankfull Width:	24 m
Depth:	60 cm

Water Chemistry - 8/19/2013

Ammonia As Nitrogen	0.02 mg/l	Nitrate+nitrite As N	0.06 mg/l
Total Phosphorus	0.011 mg/l	Total Kjeldahl Nitrogen	0.1 mg/l
Total Suspended Solids	<2 mg/l	Dissolved Organic Carbon	2.6 mg/l
Total Dissolved Solids	43 mg/l	Orthophosphate As Phosphorus	2 ug/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>
Altered Hydrology	Below Dam	Boulder 5 %
Nps Pollution	Below Road Crossing	Rubble/Cobble 45 %
		Sand 50 %

Landcover Summary - 2004 Data

Sample Comments

7/16/2013 - DISTANCE FROM DAM - 122M - DISTANCE FROM ROAD - 145 M - ROUTE BRIDGE



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Aquatic Life Taxonomic Inventory Report**

Station Number: S-1001 Waterbody: Little Androscoggin River - Station 1001 Town: Oxford
Log Number: 2206 Subsample Factor: X10 Replicates: 3 Calculated: 4/30/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Girardia</i>	03010102002		53.33		--		0.8
<i>Girardia tigrina</i>	03010102002001	53.33			--	0.8	
<i>Prostoma</i>	04010101001	6.67	6.67		--	0.1	0.1
<i>Nais</i>	08020202009		3.33		CG		0.1
<i>Nais behningi</i>	08020202009003	3.33			--	0.1	
Entomobryidae	09020103	3.33	3.33		--	0.1	0.1
<i>Pteronarcys</i>	09020205023		6.67	0	SH		0.1
<i>Pteronarcys dorsata</i>	09020205023063	6.67			--	0.1	
Perlidae	09020209	3.33	3.33		--	0.1	0.1
<i>Paragnetina</i>	09020209049		13.33	1	PR		0.2
<i>Paragnetina immarginata</i>	09020209049149	3.33			--	0.1	
<i>Paragnetina media</i>	09020209049151	10.00			--	0.2	
<i>Boyeria</i>	09020301004		3.33	2	PR		0.1
<i>Boyeria vinosa</i>	09020301004012	3.33			--	0.1	
<i>Hagenius</i>	09020302008		3.33	1	PR		0.1
<i>Hagenius brevistylus</i>	09020302008015	3.33			PR	0.1	
<i>Ophiogomphus</i>	09020302015		3.33	1	PR		0.1
<i>Ophiogomphus rupinsulensis</i>	09020302015035	3.33			--	0.1	
Baetidae	09020401	20.00			--	0.3	
<i>Baetis</i>	09020401001	20.00	33.33	4	CG	0.3	0.5
<i>Plauditus</i>	09020401012	10.00	16.67		CG	0.2	0.3
Heptageniidae	09020402	20.00	20.00		--	0.3	0.3
<i>Maccaffertium</i>	09020402015	13.33	13.33	4	SC	0.2	0.2
<i>Isonychia</i>	09020404018	90.00	90.00	2	CF	1.4	1.4
<i>Ephemerella</i>	09020410035	6.67	6.67	1	CG	0.1	0.1
<i>Chimarra</i>	09020601003	190.00	1020.00	2	CF	2.9	15.7
<i>Chimarra obscura</i>	09020601003003	830.00			--	12.7	
<i>Neureclipsis</i>	09020603008	3.33	3.33	7	CF	0.1	0.1
Hydropsychidae	09020604	503.33			--	7.7	
<i>Cheumatopsyche</i>	09020604015	1056.67	1226.41	5	CF	16.2	18.8
<i>Hydropsyche</i>	09020604016	706.67	1485.62	4	CF	10.8	22.8
<i>Hydropsyche bronta</i>	09020604016029	43.33			--	0.7	
<i>Hydropsyche morosa</i>	09020604016030	326.67			--	5.0	
<i>Hydropsyche sparna</i>	09020604016032	20.00			--	0.3	
<i>Hydropsyche depravata species group</i>	09020604016041	160.00			CF	2.5	
<i>Hydropsyche placoda</i>	09020604016059	23.33			--	0.4	
<i>Macrostemum</i>	09020604018		924.64	3	CF		14.2



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		Actual	Adjusted			Actual	Adjusted
<i>Macrostemum zebratum</i>	09020604018054	796.67			--	12.2	
<i>Rhyacophila</i>	09020605019		3.33	2	PR		0.1
<i>Rhyacophila minor</i>	09020605019063	3.33			PR	0.1	
<i>Brachycentrus</i>	09020609043		3.33	0	CF		0.1
<i>Brachycentrus numerosus</i>	09020609043098	3.33			--	0.1	
Limnephilidae	09020610				--		
<i>Oecetis</i>	09020618078	3.33	3.33	8	PR	0.1	0.1
<i>Corydalus</i>	09020701002		6.67	6	PR		0.1
<i>Corydalus cornutus</i>	09020701002002	6.67			--	0.1	
Chironomidae	09021011	3.33			--	0.1	
<i>Nilotanyus</i>	09021011012		10.03	6	PR		0.2
<i>Nilotanyus fimbriatus</i>	09021011012027	10.00			--	0.2	
<i>Corynoneura</i>	09021011036	6.67	6.69	7	CG	0.1	0.1
<i>Eukiefferiella</i>	09021011041		56.85	8	CG		0.9
<i>Eukiefferiella similis group</i>	09021011041082	56.67			--	0.9	
<i>Nanocladius</i>	09021011049		6.69	3	CG		0.1
<i>Nanocladius spinipennis</i>	09021011049090	6.67			--	0.1	
<i>Parametriocnemus</i>	09021011053	6.67	6.69	5	CG	0.1	0.1
<i>Rheocricotopus</i>	09021011057		30.10	6	CG		0.5
<i>Rheocricotopus robacki</i>	09021011057105	30.00			--	0.5	
<i>Thienemanniella</i>	09021011062		6.69	6	CG		0.1
<i>Thienemanniella lobapodema</i>	09021011062114	6.67			--	0.1	
<i>Tvetenia</i>	09021011065		277.58	5	CG		4.3
<i>Tvetenia vitracies</i>	09021011065113	256.67			--	3.9	
<i>Tvetenia paucunca</i>	09021011065114	20.00			--	0.3	
<i>Rheotanytarsus</i>	09021011072	506.67	508.34	6	CF	7.8	7.8
<i>Microtendipes</i>	09021011094		6.69	6	CF		0.1
<i>Microtendipes rydalensis group</i>	09021011094168	6.67			--	0.1	
<i>Polypedilum</i>	09021011102		96.99	6	SH		1.5
<i>Polypedilum aviceps</i>	09021011102181	13.33			--	0.2	
<i>Polypedilum flavum</i>	09021011102182	60.00			--	0.9	
<i>Polypedilum laetum</i>	09021011102186	23.33			--	0.4	
<i>Simulium</i>	09021012047	6.67	433.33	4	CF	0.1	6.6
<i>Simulium fibrinflatum</i>	09021012047059	160.00			--	2.5	
<i>Simulium jenningsi</i>	09021012047060	16.67			--	0.3	
<i>Simulium tuberosum</i>	09021012047067	6.67			--	0.1	
<i>Simulium jenningsi species group</i>	09021012047070	243.33			CF	3.7	
<i>Hemerodromia</i>	09021016057	6.67	6.67	3	PR	0.1	0.1



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		Actual	Adjusted			Actual	Adjusted
<i>Optioservus</i>	09021113067	23.33	26.67	3	SC	0.4	0.4
<i>Optioservus trivittatus</i>	09021113067048	3.33			--	0.1	
<i>Oulimnius</i>	09021113068		3.33		--		0.1
<i>Oulimnius latiusculus</i>	09021113068049	3.33			--	0.1	
<i>Promoresia</i>	09021113069		6.67		--		0.1
<i>Promoresia tardella</i>	09021113069052	6.67			--	0.1	
<i>Stenelmis</i>	09021113070	56.67	63.33	5	SC	0.9	1.0
<i>Stenelmis crenata</i>	09021113070055	6.67			--	0.1	
<i>Amnicola</i>	10010104013		3.33		SC		0.1
<i>Amnicola limosa</i>	10010104013018	3.33			--	0.1	
Sphaeriidae	10020201	3.33	3.33		CF	0.1	0.1