



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

**Station Information**

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

**Sample Information**

<b>Log Number: 2667</b>	Type of Sample: ROCK BAG	Date Deployed: 7/19/2018
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/16/2018

**Classification Attainment**

<b>Statutory Class: C</b>	<b>Final Determination: A</b>	Date: 3/29/2019
Model Result with $P \geq 0.6$ : A	<b>Reason for Determination: Model</b>	
Date Last Calculated: 3/29/2019	Comments:	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.60	Class A, B, or C	1.00
Class B	0.39	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.88
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.12

**Model Variables**

01 Total Mean Abundance	426.33	18 Relative Abundance Ephemeroptera	0.34
02 Generic Richness	56.00	19 EPT Generic Richness	27.00
03 Plecoptera Mean Abundance	4.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	143.00	23 Relative Generic Richness- Plecoptera	0.02
05 Shannon-Wiener Generic Diversity	3.88	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	131.43
06 Hilsenhoff Biotic Index	4.70	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	94.89
07 Relative Abundance - Chironomidae	0.23	28 EP Generic Richness/14	0.93
08 Relative Generic Richness Diptera	0.30	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	3.67		
11 <i>Cheumatopsyche</i> Abundance	117.67		
12 EPT Generic Richness/ Diptera Generic Richness	1.59		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	4.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	24.84		
17 Chironomini Abundance (Family Functional Group)	8.73		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Cheumatopsyche</i>	27.60
2	<i>Maccaffertium</i>	21.24
3	<i>Rheotanytarsus</i>	8.50
4	<i>Baetis</i>	8.29
5	<i>Thienemannimyia</i>	2.76



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**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: MICHAEL COLE

**Waterbody Information - Deployment**

Temperature: 21.9 deg C  
Dissolved Oxygen: 8.71 mg/l  
Dissolved Oxygen Saturation: 98.4 %  
Specific Conductance: 128.2 uS/cm  
Velocity: 18.3 cm/s  
pH: 7.09  
Wetted Width: 22 m  
Bankfull Width: 27 m  
Depth: 59 cm

**Waterbody Information - Retrieval**

Temperature: 24.8 deg C  
Dissolved Oxygen: 8.94 mg/l  
Dissolved Oxygen Saturation: 107 %  
Specific Conductance: 113.1 uS/cm  
Velocity: 24.4 cm/s  
pH: 6.98  
Wetted Width: 22 m  
Bankfull Width: 27 m  
Depth: 60 cm

**Water Chemistry - 7/23/2018**

Nitrate + Nitrite As Nitrogen	0.09 mg/l	Orthophosphate As Phosphorus	1 ug/l
Total Alkalinity	18 mg/l	Total Kjeldahl Nitrogen (organic A	0.2 mg/l
Total Phosphorus Mixed Forms (po	13 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>	
Nps Pollution	Below Dam	Boulder	5 %
Nutrients	Below Point Source	Rubble/Cobble	45 %
		Sand	40 %
		Silt	10 %

**Landcover Summary - 2004 Data**

**Sample Comments**

FISH, SILTY BOTTOM



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Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Girardia</i>	03010102002	2.00	2.00		--	0.5	0.5
<i>Orconectes</i>	09010301008	1.67	1.67		CG	0.4	0.4
<i>Acroneuria</i>	09020209042	3.33	4.33	0	PR	0.8	1.0
<i>Acroneuria lycorias</i>	09020209042125	1.00			--	0.2	
<i>Boyeria</i>	09020301004		3.67	2	PR		0.9
<i>Boyeria grafiana</i>	09020301004011	0.67			--	0.2	
<i>Boyeria vinosa</i>	09020301004012	3.00			--	0.7	
<i>Hagenius</i>	09020302008		0.33	1	PR		0.1
<i>Hagenius brevistylus</i>	09020302008015	0.33			PR	0.1	
<i>Baetis</i>	09020401001	1.67	35.33	4	CG	0.4	8.3
<i>Baetis flavistriga</i>	09020401001004	23.33			--	5.5	
<i>Baetis intercalaris</i>	09020401001008	10.33			--	2.4	
<i>Centroptilum</i>	09020401003	0.33	0.33	2	CG	0.1	0.1
<i>Acerpenna</i>	09020401007	1.00	4.00	5	CG	0.2	0.9
<i>Acerpenna macdunnoughi</i>	09020401007001	0.33			--	0.1	
<i>Acerpenna pygmaea</i>	09020401007011	2.67			--	0.6	
<i>Procloeon</i>	09020401010	3.33	3.33		CG	0.8	0.8
<i>Dipheter</i>	09020401013		0.33		--		0.1
<i>Dipheter hageni</i>	09020401013001	0.33			--	0.1	
<i>Iswaeon</i>	09020401015	0.67	0.67		--	0.2	0.2
Heptageniidae	09020402	2.33			--	0.5	
<i>Leucrocuta</i>	09020402011	0.33	0.34	1	SC	0.1	0.1
<i>Stenacron</i>	09020402014	3.33	4.10	7	SC	0.8	1.0
<i>Stenacron interpunctatum</i>	09020402014045	0.67			--	0.2	
<i>Maccaffertium</i>	09020402015	69.00	90.56	4	SC	16.2	21.2
<i>Maccaffertium modestum</i>	09020402015051	19.00			--	4.5	
<i>Maccaffertium vicarium</i>	09020402015055	0.33			--	0.1	
<i>Isonychia</i>	09020404018		1.00	2	CF		0.2
<i>Isonychia bicolor</i>	09020404018059	1.00			--	0.2	
<i>Ephemerella</i>	09020410035	1.33	1.33	1	CG	0.3	0.3
<i>Caenis</i>	09020412040	1.67	1.67	7	CG	0.4	0.4
<i>Chimarra</i>	09020601003	0.67	4.33	2	CF	0.2	1.0
<i>Chimarra aterrima</i>	09020601003002	1.33			--	0.3	
<i>Chimarra obscura</i>	09020601003003	2.33			--	0.5	
<i>Cernotina</i>	09020603006	2.67	2.67		PR	0.6	0.6
<i>Neureclipsis</i>	09020603008	0.67	0.67	7	CF	0.2	0.2
Hydropsychidae	09020604				--		



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		Actual	Adjusted			Actual	Adjusted
<i>Cheumatopsyche</i>	09020604015	117.67	117.67	5	CF	27.6	27.6
<i>Hydropsyche</i>	09020604016	1.33	3.67	4	CF	0.3	0.9
<i>Hydropsyche morosa</i>	09020604016030	1.00			--	0.2	
<i>Hydropsyche betteni</i>	09020604016037	1.33			--	0.3	
<i>Macrostemum</i>	09020604018	6.00	6.00	3	CF	1.4	1.4
Hydroptilidae	09020607				--		
<i>Hydroptila</i>	09020607026	1.67	1.67	6	P	0.4	0.4
<i>Oxyethira</i>	09020607028	0.33	0.33	3	P	0.1	0.1
<i>Brachycentrus</i>	09020609043		0.67	0	CF		0.2
<i>Brachycentrus numerosus</i>	09020609043098	0.67			--	0.2	
<i>Micrasema</i>	09020609044	1.67	1.67	2	SH	0.4	0.4
<i>Pycnopsyche</i>	09020610049	6.33	6.33	4	SH	1.5	1.5
Leptoceridae	09020618	0.33			--	0.1	
<i>Ceraclea</i>	09020618072	0.67	0.69	3	CG	0.2	0.2
<i>Triaenodes</i>	09020618077	0.33	0.35	6	SH	0.1	0.1
<i>Oecetis</i>	09020618078	1.33	8.30	8	PR	0.3	1.9
<i>Oecetis avara</i>	09020618078153	3.67			--	0.9	
<i>Oecetis persimilis</i>	09020618078157	3.00			--	0.7	
<i>Nigronia</i>	09020701003		0.67	0	PR		0.2
<i>Nigronia serricornis</i>	09020701003003	0.67			--	0.2	
<i>Tipula</i>	09021001002	0.33	0.33	4	SH	0.1	0.1
Chironomidae	09021011	0.67			--	0.2	
<i>Ablabesmyia</i>	09021011001		2.35	8	PR		0.6
<i>Ablabesmyia mallochii</i>	09021011001004	2.33			--	0.5	
<i>Labrundinia</i>	09021011008		2.01	7	PR		0.5
<i>Labrundinia pilosella</i>	09021011008022	2.00			--	0.5	
<i>Nilotanypus</i>	09021011012		8.73	6	PR		2.0
<i>Nilotanypus fimbriatus</i>	09021011012027	8.67			--	2.0	
<i>Thienemannimyia</i>	09021011020		11.75	3	PR		2.8
<i>Thienemannimyia group</i>	09021011020041	11.67			--	2.7	
<i>Corynoneura</i>	09021011036	2.00	2.01	7	CG	0.5	0.5
<i>Cricotopus</i>	09021011037	2.00	4.70	7	SH	0.5	1.1
<i>Cricotopus bicinctus</i>	09021011037057	2.67			--	0.6	
<i>Nanocladius</i>	09021011049	4.67	4.70	3	CG	1.1	1.1
<i>Rheocricotopus</i>	09021011057	2.67	2.68	6	CG	0.6	0.6
<i>Thienemanniella</i>	09021011062	7.33	7.38	6	CG	1.7	1.7
<i>Rheotanytarsus</i>	09021011072	0.33	36.25	6	CF	0.1	8.5



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		Actual	Adjusted			Actual	Adjusted
<i>Rheotanytarsus exiguus group</i>	09021011072127	33.67			CF	7.9	
<i>Rheotanytarsus pellucidus</i>	09021011072128	2.00			CF	0.5	
<i>Tanytarsus</i>	09021011076	6.67	6.71	6	CF	1.6	1.6
<i>Microtendipes</i>	09021011094		5.71	6	CF		1.3
<i>Microtendipes rydalensis group</i>	09021011094168	5.67			--	1.3	
<i>Nilothauma</i>	09021011095	1.33	1.34	2	--	0.3	0.3
<i>Polypedilum</i>	09021011102		1.68	6	SH		0.4
<i>Polypedilum flavum</i>	09021011102182	1.33			--	0.3	
<i>Polypedilum halterale group</i>	09021011102193	0.33			--	0.1	
<i>Simulium</i>	09021012047	0.33	0.33	4	CF	0.1	0.1
<i>Hemerodromia</i>	09021016057	0.33	0.33	3	PR	0.1	0.1
<i>Dubiraphia</i>	09021113064	4.00	4.00	6	--	0.9	0.9
<i>Macronychus</i>	09021113065		4.33	4	--		1.0
<i>Macronychus glabratus</i>	09021113065040	4.33			--	1.0	
<i>Optioservus</i>	09021113067	0.67	0.67	3	SC	0.2	0.2
<i>Optioservus elegans</i>	09021113067051	0.33			--	0.1	
<i>Optioservus tardella</i>	09021113067052	0.67			--	0.2	
<i>Promoesia</i>	09021113069		1.00		--		0.2
<i>Stenelmis</i>	09021113070	5.00	5.00	5	SC	1.2	1.2
<i>Menetus</i>	10010203031		0.67		--		0.2
<i>Menetus dilatatus</i>	10010203031059	0.67			--	0.2	
Sphaeriidae	10020201	1.00	1.00		CF	0.2	0.2