



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

Station Information

Station Number: S-1009	River Basin: Androscoggin
Waterbody: Little Androscoggin River - Station 1009	HUC8 Name: Lower Androscoggin
Town: Greenwood	Latitude: 44 19 39.25 N
Directions: 10-15M UPSTREAM OF WEST PARIS ROAD	Longitude: 70 37 13.54 W
	Stream Order: 2

Sample Information

Log Number: 2680	Type of Sample: ROCK BAG	Date Deployed: 7/31/2018
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/28/2018

Classification Attainment

Statutory Class: A	Final Determination: A	Date: 3/11/2019
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 3/8/2019	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.91	Class C	0.00
Class B	0.09	NA	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	1.00
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.00

Model Variables

01 Total Mean Abundance	450.00	18 Relative Abundance Ephemeroptera	0.27
02 Generic Richness	69.00	19 EPT Generic Richness	33.00
03 Plecoptera Mean Abundance	15.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	122.67	23 Relative Generic Richness- Plecoptera	0.12
05 Shannon-Wiener Generic Diversity	4.67	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	35.71
06 Hilsenhoff Biotic Index	3.84	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	17.00
07 Relative Abundance - Chironomidae	0.26	28 EP Generic Richness/14	1.50
08 Relative Generic Richness Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.86
09 <i>Hydropsyche</i> Abundance	76.33		
11 <i>Cheumatopsyche</i> Abundance	28.33		
12 EPT Generic Richness/ Diptera Generic Richness	1.43		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	8.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	17.43		
17 Chironomini Abundance (Family Functional Group)	18.10		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	16.96
2	<i>Neoleptophlebia</i>	11.69
3	<i>Rheotanytarsus</i>	9.61
4	<i>Baetis</i>	6.37
5	<i>Cheumatopsyche</i>	6.30



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature: 21.3 deg C
Dissolved Oxygen: 10.02 mg/l
Dissolved Oxygen Saturation: 112.6 %
Specific Conductance: 65.1 uS/cm
Velocity: 33.5 cm/s
pH: 6.99
Wetted Width: 5.6 m
Bankfull Width: 9 m
Depth: 22 cm

Waterbody Information - Retrieval

Temperature: 23.2 deg C
Dissolved Oxygen: 9.8 mg/l
Dissolved Oxygen Saturation: 115 %
Specific Conductance: 69.5 uS/cm
Velocity: 33.5 cm/s
pH: 6.85
Wetted Width: 5.4 m
Bankfull Width: 9 m
Depth: 19 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Conifer	Partly Open	Mountainous	
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Below Road Crossing	Boulder	5 %
		Gravel	40 %
		Rubble/Cobble	35 %
		Sand	20 %

Landcover Summary - 2004 Data

Sample Comments

Small fish, considerable bank undercutting. Tributary SPC = 49.6



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Aquatic Life Taxonomic Inventory Report**

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Log Number: 2680 Subsample Factor: X1 Replicates: 3 Calculated: 3/8/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Paracapnia</i>	09020203018	0.67	0.67	1	SH	0.1	0.1
<i>Leuctra</i>	09020204020	2.33	2.33	0	SH	0.5	0.5
<i>Pteronarcys</i>	09020205023		2.00	0	SH		0.4
<i>Pteronarcys biloba</i>	09020205023061	2.00			--	0.4	
Perlodidae	09020207	1.00	1.00		--	0.2	0.2
Chloroperlidae	09020208	0.67	0.67		--	0.1	0.1
<i>Acroneuria</i>	09020209042	3.00	5.67	0	PR	0.7	1.3
<i>Acroneuria abnormis</i>	09020209042121	2.00		0	PR	0.4	
<i>Acroneuria lycorias</i>	09020209042125	0.67			--	0.1	
<i>Paragnetina</i>	09020209049	2.67	2.67	1	PR	0.6	0.6
<i>Aagnetina</i>	09020209050		0.33	2	PR		0.1
<i>Aagnetina capitata</i>	09020209050152	0.33		2	PR	0.1	
<i>Boyeria</i>	09020301004		5.00	2	PR		1.1
<i>Boyeria grafiana</i>	09020301004011	1.00			--	0.2	
<i>Boyeria vinosa</i>	09020301004012	4.00			--	0.9	
Gomphidae	09020302	2.33	2.33		--	0.5	0.5
<i>Ophiogomphus</i>	09020302015	1.67	1.67	1	PR	0.4	0.4
<i>Cordulegaster</i>	09020303019	0.33	0.33	3	PR	0.1	0.1
<i>Calopteryx</i>	09020307043	0.33	0.33	5	PR	0.1	0.1
<i>Baetis</i>	09020401001	0.33	28.67	4	CG	0.1	6.4
<i>Baetis flavistriga</i>	09020401001004	2.33			--	0.5	
<i>Baetis intercalaris</i>	09020401001008	21.00			--	4.7	
<i>Baetis pluto</i>	09020401001009	5.00			--	1.1	
<i>Acerpenna</i>	09020401007		4.33	5	CG		1.0
<i>Acerpenna macdunnoughi</i>	09020401007001	4.33			--	1.0	
<i>Acentrella</i>	09020401008	0.33	0.33	3	CG	0.1	0.1
<i>Plauditus</i>	09020401012	0.67	0.67		CG	0.1	0.1
<i>Epeorus</i>	09020402009	3.00	3.00	0	SC	0.7	0.7
<i>Leucrocuta</i>	09020402011	2.00	2.00	1	SC	0.4	0.4
<i>Maccaffertium</i>	09020402015	11.33	11.33	4	SC	2.5	2.5
<i>Isonychia</i>	09020404018	6.67	6.67	2	CF	1.5	1.5
Leptophlebiidae	09020406	1.00			--	0.2	
<i>Paraleptophlebia</i>	09020406026	2.33	2.38	1	CG	0.5	0.5
<i>Neoleptophlebia</i>	09020406027	51.67	52.62		--	11.5	11.7
Ephemerellidae	09020410	0.33			--	0.1	
<i>Ephemerella</i>	09020410035	0.67	9.31	1	CG	0.1	2.1
<i>Ephemerella subvaria</i>	09020410035111	8.33			--	1.9	



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		Actual	Adjusted			Actual	Adjusted
<i>Serratella</i>	09020410037		0.69	2	CG		0.2
<i>Serratella deficiens (Teloganopsis deficiens)</i>	09020410037121	0.67			--	0.1	
<i>Tricorythodes</i>	09020411038	0.67	0.67	4	CG	0.1	0.1
<i>Dolophilodes</i>	09020601001		10.00	0	CF		2.2
<i>Dolophilodes distincta</i>	09020601001001	10.00			--	2.2	
Polycentropodidae	09020603	3.67	3.67		--	0.8	0.8
<i>Cheumatopsyche</i>	09020604015	28.33	28.33	5	CF	6.3	6.3
<i>Hydropsyche</i>	09020604016	7.00	76.33	4	CF	1.6	17.0
<i>Hydropsyche bronta</i>	09020604016029	0.67			--	0.1	
<i>Hydropsyche morosa</i>	09020604016030	2.00			--	0.4	
<i>Hydropsyche slossonae</i>	09020604016031	1.33			--	0.3	
<i>Hydropsyche sparna</i>	09020604016032	40.67			--	9.0	
<i>Hydropsyche betteni</i>	09020604016037	24.67			--	5.5	
<i>Rhyacophila</i>	09020605019		5.00	2	PR		1.1
<i>Rhyacophila acutiloba</i>	09020605019056	0.67			PR	0.1	
<i>Rhyacophila minora</i>	09020605019063	4.33			PR	1.0	
<i>Glossosoma</i>	09020606020	0.33	0.33	0	SC	0.1	0.1
<i>Oxyethira</i>	09020607028	0.67	0.67	3	P	0.1	0.1
<i>Brachycentrus</i>	09020609043		11.67	0	CF		2.6
<i>Brachycentrus appalachia</i>	09020609043096	11.67			--	2.6	
Limnephilidae	09020610				--		
<i>Lepidostoma</i>	09020611064	1.00	1.00	1	SH	0.2	0.2
<i>Psilotreta</i>	09020614068		0.67	0	SC		0.1
<i>Psilotreta labida</i>	09020614068133	0.67			--	0.1	
<i>Helicopsyche</i>	09020616070		0.33	3	SC		0.1
<i>Helicopsyche borealis</i>	09020616070137	0.33			--	0.1	
<i>Goera</i>	09020620063	0.33	0.33	0	SC	0.1	0.1
<i>Nigronia</i>	09020701003		4.00	0	PR		0.9
<i>Nigronia serricornis</i>	09020701003003	4.00			--	0.9	
<i>Antocha</i>	09021001004	0.33	0.33	3	CG	0.1	0.1
<i>Bezzia/palpomyia</i>	09021010043	1.00	1.00	6	PR	0.2	0.2
Chironomidae	09021011	0.67			--	0.1	
<i>Nilotanytus</i>	09021011012			6	PR		
<i>Thienemannimyia</i>	09021011020		17.43	3	PR		3.9
<i>Thienemannimyia group</i>	09021011020041	17.33			--	3.9	
<i>Pagastia</i>	09021011025	0.67	0.67	1	--	0.1	0.1
<i>Brillia</i>	09021011033	0.67	0.67	5	SH	0.1	0.1



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<i>Corynoneura</i>	09021011036	4.00	4.02	7	CG	0.9	0.9
<i>Cricotopus</i>	09021011037		1.34	7	SH		0.3
<i>Cricotopus bicinctus</i>	09021011037057	1.33			--	0.3	
<i>Nanocladius</i>	09021011049	2.00	2.01	3	CG	0.4	0.4
<i>Parametrioconemus</i>	09021011053	9.33	9.39	5	CG	2.1	2.1
<i>Rheocricotopus</i>	09021011057	0.67	0.67	6	CG	0.1	0.1
<i>Thienemanniella</i>	09021011062	4.67	4.69	6	CG	1.0	1.0
<i>Tvetenia</i>	09021011065		5.36	5	CG		1.2
<i>Tvetenia vitracies</i>	09021011065113	0.67			--	0.1	
<i>Tvetenia paucunca</i>	09021011065114	4.67			--	1.0	
<i>Cladotanytarsus</i>	09021011068	0.67	0.67	7	CG	0.1	0.1
<i>Rheotanytarsus</i>	09021011072		43.24	6	CF		9.6
<i>Rheotanytarsus exiguus group</i>	09021011072127	21.00			CF	4.7	
<i>Rheotanytarsus pellucidus</i>	09021011072128	22.00			CF	4.9	
<i>Stempellinella</i>	09021011074	1.33	1.34	2	--	0.3	0.3
<i>Tanytarsus</i>	09021011076	6.00	6.03	6	CF	1.3	1.3
<i>Demicryptochironomus</i>	09021011084	2.00	2.01	8	CG	0.4	0.4
<i>Microtendipes</i>	09021011094		2.01	6	CF		0.4
<i>Microtendipes rydalensis group</i>	09021011094168	2.00			--	0.4	
<i>Polypedilum</i>	09021011102	0.67	14.08	6	SH	0.1	3.1
<i>Polypedilum aviceps</i>	09021011102181	13.33			--	3.0	
<i>Stenochironomus</i>	09021011105			5	CG		
<i>Lopescladius</i>	09021011113	1.33	1.34		CG	0.3	0.3
<i>Saetheria</i>	09021011132		1.34		--		0.3
<i>Saetheria tylus</i>	09021011132001	1.33			--	0.3	
<i>Simulium</i>	09021012047	13.00	13.00	4	CF	2.9	2.9
Empididae	09021016			6	--		
<i>Roederiodes</i>	09021016058	0.33	0.33	3	PR	0.1	0.1
<i>Psephenus</i>	09021108058		0.33	4	SC		0.1
<i>Psephenus herricki</i>	09021108058028	0.33			--	0.1	
<i>Macronychus</i>	09021113065		0.33	4	--		0.1
<i>Macronychus glabratus</i>	09021113065040	0.33			--	0.1	
<i>Optioservus</i>	09021113067	9.00	10.00	3	SC	2.0	2.2
<i>Optioservus ovalis</i>	09021113067046	1.00			--	0.2	
<i>Promoesia</i>	09021113069		2.00		--		0.4
<i>Promoesia tardella</i>	09021113069052	2.00			--	0.4	
<i>Stenelmis</i>	09021113070	11.67	11.67	5	SC	2.6	2.6
Acariformes	090301	0.33	0.33		--	0.1	0.1



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<i>Pisidium</i>	10020201002	2.33	2.33		CF	0.5	0.5