



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

Station Information

**Station Number: S-79**  
Waterbody: Little Androscoggin River - Station 79  
Town: Paris  
Directions: 70 M BELOW SO. PARIS POTW

DEP Drainage: Androscoggin  
HUC8 Name: Lower Androscoggin  
Latitude: 44 12 39.95 N  
Longitude: 70 31 4.66 W  
Stream Order: 4

Sample Information

**Log Number: 2208**  
Subsample Factor: X4

Type of Sample: ROCK BASKET  
Replicates: 3

Date Deployed: 7/16/2013  
Date Retrieved: 8/19/2013

Classification Attainment

**Statutory Class: C**  
Model Result with P>.6: A  
Date Last Calculated: 3/14/2014

**Final Determination: A**  
**Reason for Determination: Model**  
Comments:

Date: 3/18/2014

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.60	Class A, B, or C	1.00
Class B	0.39	Non-Attainment	0.00
Class C			
NA			
0.00			
B or Better Model		A Model	
Class A or B	1.00	Class A	0.93
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.07

Model Variables

01 Total Mean Abundance	1369.33	18 Relative Abundance Ephemeroptera	0.23
02 Generic Richness	52.00	19 EPT Generic Richness	22.00
03 Plecoptera Mean Abundance	20.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	1.34
04 Ephemeroptera Mean Abundance	320.00	23 Relative Generic Richness- Plecoptera	0.08
05 Shannon-Wiener Generic Diversity	4.12	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	35.75
06 Hilsenhoff Biotic Index	3.82	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	110.99
07 Relative Abundance - Chironomidae	0.34	28 EP Generic Richness/14	1.07
08 Relative Generic Richness Diptera	0.40	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	155.01		
11 <i>Cheumatopsyche</i> Abundance	22.34		
12 EPT Generic Richness/ Diptera Generic Richness	1.05		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	17.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	16.09		
17 Chironomini Abundance (Family Functional Group)	210.55		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Polypedilum</i>	14.59
2	<i>Chimarra</i>	13.44
3	<i>Hydropsyche</i>	11.32
4	<i>Rheotanytarsus</i>	10.58
5	<i>Ephemerella</i>	7.40



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**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature: 22.1 deg C  
Dissolved Oxygen: 7.8 mg/l  
Specific Conductance: 58 uS/cm  
Velocity: 73.5 cm/s  
pH: 6.4  
Wetted Width: 21 m  
Bankfull Width: 21 m  
Depth: 50 cm

**Waterbody Information - Retrieval**

Temperature: 18.2 deg C  
Dissolved Oxygen: 8.4 mg/l  
Specific Conductance: 56 uS/cm  
Velocity: 81.6 cm/s  
pH: 6.25  
Wetted Width: 21 m  
Bankfull Width: 21 m  
Depth: 40 cm

**Water Chemistry - 8/19/2013**

Ammonia As Nitrogen	0.01 mg/l	Soluble Reactive Phosphorus	3 ug/l
Nitrate+nitrite As N	0.12 mg/l	Total Phosphorus	0.013 mg/l
Total Kjeldahl Nitrogen	0.1 mg/l	Total Suspended Solids	<2 mg/l
Dissolved Organic Carbon	2.3 mg/l	Total Dissolved Solids	56 mg/l

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Partly Open	Rolling
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
BOD (Low DO)	Below Point Source	Gravel 50 %
Nutrients	Below POTW	Rubble/Cobble 20 %
Organic Solids	Main Stem	Sand 30 %

**Landcover Summary - 2004 Data**

Total Area (ac)	21197	High Int. Dev. %	1.0	Water %	0.6	Non-vegetated %	0.3
		Med Int. Dev. %	1.1	Wetland %	1.6	Tilled Agriculture %	1.3
		Low Int. Dev. %	3.7	Upland Woody %	82.3	Grassland %	7.4
		Development %	5.8	Natural %	84.0	Human Altered %	15.4
						Impervious %	4.7

**Sample Comments**

8/19/13 - FISH OBSERVED



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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>Nais</i>	08020202009		2.67		CG		0.2
<i>Nais behningi</i>	08020202009003	1.33			--	0.1	
<i>Nais communis</i>	08020202009005	1.33			--	0.1	
<i>Paracapnia</i>	09020203018	1.33	1.33	1	SH	0.1	0.1
<i>Sweltsa</i>	09020208040	1.33	1.33		PR	0.1	0.1
Perlidae	09020209	1.33			--	0.1	
<i>Acroneuria</i>	09020209042		15.89	0	PR		1.2
<i>Acroneuria abnormis</i>	09020209042121	5.33		0	PR	0.4	
<i>Acroneuria lycorias</i>	09020209042125	9.33			--	0.7	
<i>Neoperla</i>	09020209048	1.33	1.44	1	PR	0.1	0.1
<i>Boyeria</i>	09020301004		1.33	2	PR		0.1
<i>Boyeria vinosa</i>	09020301004012	1.33			--	0.1	
Baetidae	09020401	10.67			--	0.8	
<i>Baetis</i>	09020401001	9.33	34.14	4	CG	0.7	2.5
<i>Baetis flavistriga</i>	09020401001004	4.00			--	0.3	
<i>Baetis intercalaris</i>	09020401001008	4.00			--	0.3	
<i>Baetis pluto</i>	09020401001009	8.00			--	0.6	
<i>Plauditus</i>	09020401012	1.33	1.80		CG	0.1	0.1
<i>Diphetor</i>	09020401013		5.39		--		0.4
<i>Diphetor hageni</i>	09020401013001	4.00			--	0.3	
Heptageniidae	09020402	14.67			--	1.1	
<i>Epeorus</i>	09020402009	5.33	6.24	0	SC	0.4	0.5
<i>Maccaffertium</i>	09020402015	72.00	95.10	4	SC	5.3	6.9
<i>Maccaffertium luteum</i>	09020402015049	2.67			--	0.2	
<i>Maccaffertium modestum</i>	09020402015051	6.67			--	0.5	
<i>Isonychia</i>	09020404018	68.00	68.00	2	CF	5.0	5.0
Leptophlebiidae	09020406	1.33	1.33		--	0.1	0.1
Ephemerellidae	09020410	1.33			--	0.1	
<i>Ephemerella</i>	09020410035	100.00	101.32	1	CG	7.3	7.4
<i>Eurylophella</i>	09020410036	1.33	1.35	3	CG	0.1	0.1
<i>Tricorythodes</i>	09020411038	2.67	2.67	4	CG	0.2	0.2
<i>Caenis</i>	09020412040	1.33	2.67	7	CG	0.1	0.2
<i>Caenis tardella</i>	09020412040137	1.33			--	0.1	
<i>Dolophilodes</i>	09020601001	6.67	6.67	0	CF	0.5	0.5
<i>Chimarra</i>	09020601003	162.67	184.00	2	CF	11.9	13.4
<i>Chimarra obscura</i>	09020601003003	1.33			--	0.1	
<i>Chimarra socia</i>	09020601003004	20.00			--	1.5	
Hydropsychidae	09020604	12.00			--	0.9	



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		Actual	Adjusted			Actual	Adjusted
<i>Cheumatopsyche</i>	09020604015	21.33	22.34	5	CF	1.6	1.6
<i>Hydropsyche</i>	09020604016	78.67	155.01	4	CF	5.7	11.3
<i>Hydropsyche bronta</i>	09020604016029	18.67			--	1.4	
<i>Hydropsyche morosa</i>	09020604016030	2.67			--	0.2	
<i>Hydropsyche sparna</i>	09020604016032	20.00			--	1.5	
<i>Hydropsyche depravata complex</i>	09020604016041	9.33			CF	0.7	
<i>Hydropsyche placoda</i>	09020604016059	18.67			--	1.4	
<i>Macrostemum</i>	09020604018		87.98	3	CF		6.4
<i>Macrostemum zebratum</i>	09020604018054	84.00			--	6.1	
<i>Rhyacophila</i>	09020605019		26.67	2	PR		1.9
<i>Rhyacophila fuscula</i>	09020605019060	1.33			PR	0.1	
<i>Rhyacophila minor</i>	09020605019063	25.33			PR	1.9	
<i>Brachycentrus</i>	09020609043		1.33	0	CF		0.1
<i>Brachycentrus appalachia</i>	09020609043096	1.33			--	0.1	
<i>Nigronia</i>	09020701003		4.00	0	PR		0.3
<i>Nigronia serricornis</i>	09020701003003	4.00			--	0.3	
Chironomidae	09021011	2.67			--	0.2	
<i>Ablabesmyia</i>	09021011001		1.34	8	PR		0.1
<i>Ablabesmyia mallochi</i>	09021011001004	1.33			--	0.1	
<i>Conchapelopia</i>	09021011004	2.67	2.68	6	PR	0.2	0.2
<i>Pentaneura</i>	09021011014		1.34	6	PR		0.1
<i>Pentaneura inconspicua</i>	09021011014028	1.33			--	0.1	
<i>Rheopelopia</i>	09021011017		9.39		PR		0.7
<i>Rheopelopia acra group</i>	09021011017036	9.33			--	0.7	
<i>Trissopelopia</i>	09021011021		1.34		PR		0.1
<i>Trissopelopia ogemawi</i>	09021011021042	1.33			--	0.1	
<i>Brillia</i>	09021011033	5.33	5.36	5	SH	0.4	0.4
<i>Corynoneura</i>	09021011036	2.67	2.68	7	CG	0.2	0.2
<i>Nanocladius</i>	09021011049		2.68	3	CG		0.2
<i>Nanocladius distinctus</i>	09021011049087				--		
<i>Nanocladius spiniplenus</i>	09021011049090	1.33			--	0.1	
<i>Nanocladius downesi</i>	09021011049092	1.33			--	0.1	
<i>Parakiefferiella</i>	09021011052				CG		
<i>Parametriocnemus</i>	09021011053	17.33	17.43	5	CG	1.3	1.3
<i>Rheocricotopus robacki</i>	09021011057105				--		
<i>Synorthocladius</i>	09021011061			2	CG		
<i>Thienemanniella</i>	09021011062		4.02	6	CG		0.3
<i>Thienemanniella xena</i>	09021011062110	4.00			--	0.3	



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<i>Tvetenia</i>	09021011065		42.91	5	CG		3.1
<i>Tvetenia vitracies</i>	09021011065113	20.00			--	1.5	
<i>Tvetenia paucunca</i>	09021011065114	22.67			--	1.7	
<i>Micropsectra</i>	09021011070	1.33	1.34	7	CG	0.1	0.1
<i>Rheotanytarsus</i>	09021011072	144.00	144.84	6	CF	10.5	10.6
<i>Stempellinella</i>	09021011074		1.34	2	--		0.1
<i>Stempellinella fimbriata</i>	09021011074002	1.33			--	0.1	
<i>Tanytarsus</i>	09021011076	12.00	12.07	6	CF	0.9	0.9
<i>Cryptochironomus</i>	09021011082	1.33	1.34	8	PR	0.1	0.1
<i>Microtendipes</i>	09021011094		4.02	6	CF		0.3
<i>Microtendipes rydalensis group</i>	09021011094168	4.00			--	0.3	
<i>Nilothauma</i>	09021011095	5.33	5.36	2	--	0.4	0.4
<i>Polypedilum</i>	09021011102		199.82	6	SH		14.6
<i>Polypedilum aviceps</i>	09021011102181	188.00			--	13.7	
<i>Polypedilum flavum</i>	09021011102182	10.67			--	0.8	
<i>Simulium</i>	09021012047	4.00	29.33	4	CF	0.3	2.1
<i>Simulium fibrinflatum</i>	09021012047059	1.33			--	0.1	
<i>Simulium tuberosum</i>	09021012047067	9.33			--	0.7	
<i>Simulium jenningsi complex</i>	09021012047070	14.67			CF	1.1	
<i>Hemerodromia</i>	09021016057	1.33	1.33	3	PR	0.1	0.1
<i>Psephenus</i>	09021108058		6.67	4	SC		0.5
<i>Psephenus herricki</i>	09021108058028	6.67			--	0.5	
Elmidae	09021113	1.33			--	0.1	
<i>Macronychus</i>	09021113065		4.18	4	--		0.3
<i>Macronychus glabratus</i>	09021113065040	4.00			--	0.3	
<i>Optioservus</i>	09021113067	5.33	5.58	3	SC	0.4	0.4
<i>Oulimnius</i>	09021113068		1.39		--		0.1
<i>Oulimnius latiusculus</i>	09021113068049	1.33			--	0.1	
<i>Stenelmis</i>	09021113070	13.33	19.52	5	SC	1.0	1.4
<i>Stenelmis crenata</i>	09021113070055	5.33			--	0.4	
<i>Ferrissia</i>	10010204035		8.00		SC		0.6
<i>Ferrissia rivularis</i>	10010204035066	8.00			--	0.6	