



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

Station Information

Station Number: S-79	River Basin: Androscoggin
Waterbody: Little Androscoggin River - Station 79	HUC8 Name: Lower Androscoggin
Town: Paris	Latitude: 44 12 39.95 N
Directions: 70 M BELOW SO. PARIS POTW	Longitude: 70 31 4.66 W
	Stream Order: 4

Sample Information

Log Number: 2663	Type of Sample: ROCK BASKET	Date Deployed: 7/18/2018
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/15/2018

Classification Attainment

Statutory Class: C	Final Determination: A	Date: 2/8/2019
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 2/5/2019	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.63	Class C	0.02
Class B	0.35	NA	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.81
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.19

Model Variables

01 Total Mean Abundance	178.00	18 Relative Abundance Ephemeroptera	0.56
02 Generic Richness	38.00	19 EPT Generic Richness	18.00
03 Plecoptera Mean Abundance	4.33	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	100.33	23 Relative Generic Richness- Plecoptera	0.03
05 Shannon-Wiener Generic Diversity	4.00	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	20.93
06 Hilsenhoff Biotic Index	4.38	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	44.62
07 Relative Abundance - Chironomidae	0.24	28 EP Generic Richness/14	0.86
08 Relative Generic Richness Diptera	0.32	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	3.15		
11 <i>Cheumatopsyche</i> Abundance	11.19		
12 EPT Generic Richness/ Diptera Generic Richness	1.50		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	4.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.68		
17 Chironomini Abundance (Family Functional Group)	7.73		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Maccaffertium</i>	22.63
2	<i>Baetis</i>	12.94
3	<i>Rheotanytarsus</i>	12.27
4	<i>Acerpenna</i>	6.85
5	<i>Cheumatopsyche</i>	6.28



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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: 9.03 mg/l
Dissolved Oxygen Saturation: 102.9 %
Specific Conductance: 148.4 uS/cm
Velocity: 18.3 cm/s
pH: 6.99
Wetted Width: 21 m
Bankfull Width: 22 m
Depth: 28 cm

Waterbody Information - Retrieval

Temperature: 23 deg C
Dissolved Oxygen: 9.75 mg/l
Dissolved Oxygen Saturation: 113.6 %
Specific Conductance: 113.7 uS/cm
Velocity: 27.4 cm/s
pH: 6.94
Wetted Width: 20 m
Bankfull Width: 22 m
Depth: 24 cm

Water Chemistry

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

FISH, CRAYFISH



**Maine Department of Environmental Protection
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Aquatic Life Taxonomic Inventory Report**

Station Number: S-79

Waterbody: Little Androscoggin River - Station 79

Town: Paris

Log Number: 2663

Subsample Factor: X1

Replicates: 3

Calculated: 2/5/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Cambaridae	09010301	0.33	0.33		--	0.2	0.2
<i>Acroneuria</i>	09020209042		4.33	0	PR		2.4
<i>Acroneuria abnormis</i>	09020209042121	0.67		0	PR	0.4	
<i>Acroneuria lycorias</i>	09020209042125	3.67			--	2.1	
<i>Boyeria</i>	09020301004	0.33	1.00	2	PR	0.2	0.6
<i>Boyeria vinosa</i>	09020301004012	0.67			--	0.4	
Calopterygidae	09020307	0.33	0.33		--	0.2	0.2
Coenagrionidae	09020309	0.33	0.33		--	0.2	0.2
Baetidae	09020401	0.67			--	0.4	
<i>Baetis</i>	09020401001		23.03	4	CG		12.9
<i>Baetis flavistriga</i>	09020401001004	15.67			--	8.8	
<i>Baetis intercalaris</i>	09020401001008	7.00			--	3.9	
<i>Acerpenna</i>	09020401007		12.19	5	CG		6.8
<i>Acerpenna macdunnoughi</i>	09020401007001	2.00			--	1.1	
<i>Acerpenna pygmaea</i>	09020401007011	10.00			--	5.6	
<i>Labiobaetis</i>	09020401009	1.33	1.35		--	0.7	0.8
<i>Procloeon</i>	09020401010	3.33	3.39		CG	1.9	1.9
<i>Iswaeon</i>	09020401015		2.71		--		1.5
<i>Iswaeon anoka</i>	09020401015001	2.67			--	1.5	
Heptageniidae	09020402	0.33			--	0.2	
<i>Heptagenia</i>	09020402010	0.33	0.34	2	SC	0.2	0.2
<i>Leucrocuta</i>	09020402011	3.00	3.02	1	SC	1.7	1.7
<i>Stenacron</i>	09020402014	3.00	3.02	7	SC	1.7	1.7
<i>Maccaffertium</i>	09020402015	33.00	40.29	4	SC	18.5	22.6
<i>Maccaffertium modestum</i>	09020402015051	3.67			--	2.1	
<i>Maccaffertium vicarium</i>	09020402015055	3.33			--	1.9	
<i>Isonychia</i>	09020404018	6.33	6.33	2	CF	3.6	3.6
<i>Ephemerella</i>	09020410035	4.67	4.67	1	CG	2.6	2.6
<i>Chimarra</i>	09020601003	0.67	0.67	2	CF	0.4	0.4
Hydropsychidae	09020604	0.67			--	0.4	
<i>Cheumatopsyche</i>	09020604015	10.67	11.19	5	CF	6.0	6.3
<i>Hydropsyche</i>	09020604016	1.00	3.15	4	CF	0.6	1.8
<i>Hydropsyche bronta</i>	09020604016029	1.33			--	0.7	
<i>Hydropsyche betteni</i>	09020604016037	0.33			--	0.2	
<i>Hydropsyche scalaris species group</i>	09020604016048	0.33			--	0.2	
Hydroptilidae	09020607	0.33	0.33		--	0.2	0.2
<i>Lepidostoma</i>	09020611064	0.33	0.33	1	SH	0.2	0.2



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<i>Oecetis</i>	09020618078		1.33	8	PR		0.7
<i>Oecetis avara</i>	09020618078153	1.33			--	0.7	
<i>Nigronia</i>	09020701003		0.67	0	PR		0.4
<i>Nigronia serricornis</i>	09020701003003	0.67			--	0.4	
Chironomidae	09021011	0.33			--	0.2	
<i>Labrundinia</i>	09021011008	0.33	0.34	7	PR	0.2	0.2
<i>Paramerina</i>	09021011013	0.33	0.34		--	0.2	0.2
<i>Pentaneura</i>	09021011014	0.33	0.34	6	PR	0.2	0.2
<i>Thienemannimyia</i>	09021011020		0.67	3	PR		0.4
<i>Thienemannimyia group</i>	09021011020041	0.67			--	0.4	
<i>Cricotopus</i>	09021011037	0.33	6.72	7	SH	0.2	3.8
<i>Cricotopus bicinctus</i>	09021011037057	6.33			--	3.6	
<i>Nanocladius</i>	09021011049	0.67	0.67	3	CG	0.4	0.4
<i>Rheocricotopus</i>	09021011057	0.33	0.34	6	CG	0.2	0.2
<i>Rheotanytarsus</i>	09021011072	0.33	21.84	6	CF	0.2	12.3
<i>Rheotanytarsus exiguus group</i>	09021011072127	20.00			CF	11.2	
<i>Rheotanytarsus pellucidus</i>	09021011072128	1.33			CF	0.7	
<i>Tanytarsus</i>	09021011076	3.00	3.02	6	CF	1.7	1.7
<i>Microtendipes</i>	09021011094		3.36	6	CF		1.9
<i>Microtendipes rydalensis group</i>	09021011094168	3.33			--	1.9	
<i>Polypedilum</i>	09021011102	0.33	4.37	6	SH	0.2	2.5
<i>Polypedilum aviceps</i>	09021011102181	0.33			--	0.2	
<i>Polypedilum flavum</i>	09021011102182	3.67			--	2.1	
<i>Simulium</i>	09021012047	5.33	5.33	4	CF	3.0	3.0
Gyrinidae	09021104	0.33	0.33		--	0.2	0.2
<i>Optioservus</i>	09021113067	0.67	0.67	3	SC	0.4	0.4
<i>Ferrissia</i>	10010204035	3.33	5.33		SC	1.9	3.0
<i>Ferrissia rivularis</i>	10010204035066	2.00			--	1.1	