



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

Station Information

Station Number: S-999	River Basin: Androscoggin
Waterbody: Cupsuptic River - Station 999	HUC8 Name: Upper Androscoggin
Town: Upper Cupsuptic Twp	Latitude: 45 4 56.39 N
Directions: CAMPSITE W-12	Longitude: 70 53 31.27 W
	Stream Order: 3

Sample Information

Log Number: 2686	Type of Sample: ROCK BAG	Date Deployed: 7/30/2018
Subsample Factor: X1	Replicates: 2	Date Retrieved: 8/29/2018

Classification Attainment

Statutory Class: AA	Final Determination: A	Date: 2/1/2019
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 1/31/2019	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.76	Class C	0.00
Class B	0.24	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	291.50	18 Relative Abundance Ephemeroptera	0.18
02 Generic Richness	43.00	19 EPT Generic Richness	24.00
03 Plecoptera Mean Abundance	18.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	3.00
04 Ephemeroptera Mean Abundance	52.50	23 Relative Generic Richness- Plecoptera	0.14
05 Shannon-Wiener Generic Diversity	4.06	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	7.75
06 Hilsenhoff Biotic Index	4.00	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.27	28 EP Generic Richness/14	1.00
08 Relative Generic Richness Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	35.66		
11 <i>Cheumatopsyche</i> Abundance	1.75		
12 EPT Generic Richness/ Diptera Generic Richness	1.71		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	3.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	4.50		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Simulium</i>	23.84
2	<i>Hydropsyche</i>	12.23
3	<i>Rheotanytarsus</i>	8.40
4	<i>Tvetenia</i>	7.38
5	<i>Baetis</i>	7.06



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 17.4 deg C
Dissolved Oxygen: 10.26 mg/l
Dissolved Oxygen Saturation: 110.5 %
Specific Conductance: 22.2 uS/cm
Velocity: 45.7 cm/s
pH: 6.89
Wetted Width: 10 m
Bankfull Width: 18 m
Depth: 42 cm

Waterbody Information - Retrieval

Temperature: 20.4 deg C
Dissolved Oxygen: 9.78 mg/l
Dissolved Oxygen Saturation: 112.5 %
Specific Conductance: 27 uS/cm
Velocity: 15.2 cm/s
pH: 6.94
Wetted Width: 16 m
Bankfull Width: 18 m
Depth: 31 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Swamp Hardwood	Open	Hilly	
Upland Conifer			
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Logging	Below Falls	Boulder	65 %
	Pristine Landscape	Rubble/Cobble	25 %
		Sand	10 %

Landcover Summary - 2004 Data

Sample Comments

1 BAG LOST (WITH HOBO)



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Aquatic Life Taxonomic Inventory Report**

Station Number: S-999 Waterbody: Cupsuptic River - Station 999 Town: Upper Cupsuptic Twp
Log Number: 2686 Subsample Factor: X1 Replicates: 2 Calculated: 1/31/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Nais</i>	08020202009		1.00		CG		0.3
<i>Nais behningi</i>	08020202009003	1.00			--	0.3	
<i>Taeniopteryx</i>	09020202014	0.50	0.50	2	SH	0.2	0.2
<i>Pteronarcys</i>	09020205023		0.50	0	SH		0.2
<i>Pteronarcys biloba</i>	09020205023061	0.50			--	0.2	
Perlodidae	09020207	5.00	5.00		--	1.7	1.7
<i>Isoperla</i>	09020207026	9.00	9.00	2	PR	3.1	3.1
Perlidae	09020209	1.50	1.50		--	0.5	0.5
<i>Agnetina</i>	09020209050		1.50	2	PR		0.5
<i>Agnetina capitata</i>	09020209050152	1.50		2	PR	0.5	
Baetidae	09020401	9.50			--	3.3	
<i>Baetis</i>	09020401001	5.50	20.59	4	CG	1.9	7.1
<i>Baetis flavistriga</i>	09020401001004	1.00			--	0.3	
<i>Baetis pluto</i>	09020401001009	8.50			--	2.9	
<i>Plautidius</i>	09020401012	9.00	12.35		CG	3.1	4.2
<i>Iswaeon</i>	09020401015	1.50	2.06		--	0.5	0.7
Heptageniidae	09020402	0.50			--	0.2	
<i>Heptagenia</i>	09020402010	0.50	0.75	2	SC	0.2	0.3
<i>Rhithrogena</i>	09020402013	0.50	0.75	0	SC	0.2	0.3
<i>Neoleptophlebia</i>	09020406027	2.00	2.00		--	0.7	0.7
<i>Ephemerella</i>	09020410035	13.50	13.50	1	CG	4.6	4.6
<i>Serratella</i>	09020410037		0.50	2	CG		0.2
<i>Serratella deficiens (Teloganopsis deficiens)</i>	09020410037121	0.50			--	0.2	
Trichoptera	090206	0.50	0.50		--	0.2	0.2
<i>Dolophilodes</i>	09020601001		1.00	0	CF		0.3
<i>Dolophilodes distincta</i>	09020601001001	1.00			--	0.3	
<i>Chimarra</i>	09020601003		0.50	2	CF		0.2
<i>Chimarra obscura</i>	09020601003003	0.50			--	0.2	
Hydropsychidae	09020604	5.50			--	1.9	
<i>Arctopsyche</i>	09020604012	0.50	0.58		CF	0.2	0.2
<i>Cheumatopsyche</i>	09020604015	1.50	1.75	5	CF	0.5	0.6
<i>Hydropsyche</i>	09020604016	21.50	35.66	4	CF	7.4	12.2
<i>Hydropsyche slossonae</i>	09020604016031	1.00			--	0.3	
<i>Hydropsyche sparna</i>	09020604016032	8.00			--	2.7	
<i>Rhyacophila</i>	09020605019	2.00	3.00	2	PR	0.7	1.0
<i>Rhyacophila fuscula</i>	09020605019060	1.00			PR	0.3	
<i>Glossosoma</i>	09020606020		0.50	0	SC		0.2



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		Actual	Adjusted			Actual	Adjusted
<i>Glossosoma intermedium</i>	09020606020066	0.50			SC	0.2	
<i>Brachycentrus</i>	09020609043		11.00	0	CF		3.8
<i>Brachycentrus americanus</i>	09020609043095	7.50			--	2.6	
<i>Brachycentrus appalachia</i>	09020609043096	3.50			--	1.2	
<i>Neophylax</i>	09020610062	0.50	0.50	3	SC	0.2	0.2
Leptoceridae	09020618	0.50	0.50		--	0.2	0.2
<i>Dicranota</i>	09021001005	1.00	1.00	3	PR	0.3	0.3
<i>Nymphomyia</i>	09021004021	0.50	0.50		SC	0.2	0.2
<i>Corynoneura</i>	09021011036	6.50	6.50	7	CG	2.2	2.2
<i>Cricotopus</i>	09021011037		6.00	7	SH		2.1
<i>Cricotopus bicinctus</i>	09021011037057	5.50			--	1.9	
<i>Cricotopus trifascia</i>	09021011037070	0.50			--	0.2	
<i>Eukiefferiella</i>	09021011041		1.00	8	CG		0.3
<i>Eukiefferiella claripennis group</i>	09021011041075	1.00			--	0.3	
<i>Synorthocladius</i>	09021011061	5.50	5.50	2	CG	1.9	1.9
<i>Thienemanniella</i>	09021011062	1.00	5.00	6	CG	0.3	1.7
<i>Thienemanniella xena</i>	09021011062110	4.00			--	1.4	
<i>Tvetenia</i>	09021011065		21.50	5	CG		7.4
<i>Tvetenia paucunca</i>	09021011065114	21.50			--	7.4	
<i>Micropsectra</i>	09021011070	3.00	3.00	7	CG	1.0	1.0
<i>Rheotanytarsus</i>	09021011072		24.50	6	CF		8.4
<i>Rheotanytarsus exiguus group</i>	09021011072127	0.50			CF	0.2	
<i>Rheotanytarsus pellucidus</i>	09021011072128	24.00			CF	8.2	
<i>Polypedilum</i>	09021011102		4.50	6	SH		1.5
<i>Polypedilum aviceps</i>	09021011102181	3.50			--	1.2	
<i>Polypedilum flavum</i>	09021011102182	1.00			--	0.3	
<i>Simulium</i>	09021012047	0.50	69.50	4	CF	0.2	23.8
<i>Simulium tuberosum</i>	09021012047067	69.00			--	23.7	
<i>Atherix</i>	09021015055	1.00	1.00	2	PR	0.3	0.3
<i>Roederiodes</i>	09021016058	1.00	1.00	3	PR	0.3	0.3
Elmidae	09021113	0.50			--	0.2	
<i>Dubiraphia</i>	09021113064		0.52	6	--		0.2
<i>Dubiraphia minima</i>	09021113064036	0.50			--	0.2	
<i>Optioservus</i>	09021113067	0.50	1.04	3	SC	0.2	0.4
<i>Optioservus ovalis</i>	09021113067046	0.50			--	0.2	
<i>Oulimnius</i>	09021113068		0.52		--		0.2
<i>Oulimnius latiusculus</i>	09021113068049	0.50			--	0.2	
<i>Promoresia</i>	09021113069		11.93		--		4.1



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<i>Promoresia tardella</i>	09021113069052	11.50			--	3.9	