



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

Station Information

Station Number: S-999

Waterbody: Cupsuptic River - Station 999

Town: Upper Cupsuptic Twp

Directions: CAMPSITE W-12

DEP Drainage: Androscoggin

HUC8 Name: Upper Androscoggin

Latitude: 45 4 56.39 N

Longitude: 70 53 31.27 W

Stream Order: 3

Sample Information

Log Number: 2201

Type of Sample: ROCK BAG

Date Deployed: 7/17/2013

Subsample Factor: X4

Replicates: 3

Date Retrieved: 8/14/2013

Classification Attainment

Statutory Class: AA

Final Determination: A

Date: 1/30/2014

Model Result with P>.6: A

Reason for Determination: Model

Date Last Calculated: 1/29/2014

Comments:

Model Probabilities

First Stage Model

Class A	0.63	Class C	0.01
Class B	0.37	NA	0.00

B or Better Model

Class A or B	1.00
Class C or Non-Attainment	0.00

C or Better Model

Class A, B, or C	1.00
Non-Attainment	0.00

A Model

Class A	0.98
Class B or C or Non-Attainment	0.02

Model Variables

01 Total Mean Abundance	701.33	18 Relative Abundance Ephemeroptera	0.15																					
02 Generic Richness	39.00	19 EPT Generic Richness	22.00																					
03 Plecoptera Mean Abundance	24.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	1.33																					
04 Ephemeroptera Mean Abundance	105.33	23 Relative Generic Richness- Plecoptera	0.15																					
05 Shannon-Wiener Generic Diversity	3.68	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	8.25																					
06 Hilsenhoff Biotic Index	3.51	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	3.05																					
07 Relative Abundance - Chironomidae	0.21	28 EP Generic Richness/14	0.86																					
08 Relative Generic Richness Diptera	0.36	30 Presence of Class A Indicator Taxa/7	0.43																					
09 <i>Hydropsyche</i> Abundance	243.50	<table><tr><th colspan="3">Five Most Dominant Taxa</th></tr><tr><th>Rank</th><th>Taxon Name</th><th>Percent</th></tr><tr><td>1</td><td><i>Hydropsyche</i></td><td>34.72</td></tr><tr><td>2</td><td><i>Brachycentrus</i></td><td>10.27</td></tr><tr><td>3</td><td><i>Baetis</i></td><td>7.90</td></tr><tr><td>4</td><td><i>Rheotanytarsus</i></td><td>7.41</td></tr><tr><td>5</td><td><i>Polypedilum</i></td><td>6.08</td></tr></table>		Five Most Dominant Taxa			Rank	Taxon Name	Percent	1	<i>Hydropsyche</i>	34.72	2	<i>Brachycentrus</i>	10.27	3	<i>Baetis</i>	7.90	4	<i>Rheotanytarsus</i>	7.41	5	<i>Polypedilum</i>	6.08
Five Most Dominant Taxa																								
Rank	Taxon Name	Percent																						
1	<i>Hydropsyche</i>	34.72																						
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3	<i>Baetis</i>	7.90																						
4	<i>Rheotanytarsus</i>	7.41																						
5	<i>Polypedilum</i>	6.08																						
11 <i>Cheumatopsyche</i> Abundance	1.58																							
12 EPT Generic Richness/ Diptera	1.57																							
Generic Richness																								
13 Relative Abundance - Oligochaeta	0.00																							
15 Perlidae Mean Abundance (Family	5.33																							
Functional Group)																								
16 Tanypodinae Mean Abundance	0.00																							
(Family Functional Group)																								
17 Chironomini Abundance (Family	42.67																							
Functional Group)																								



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Log Number: 2201	Waterbody: Cupsuptic River - Station 999	Date Retrieved: 8/14/2013

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	20.9 deg C
Dissolved Oxygen:	7.8 mg/l
Specific Conductance:	18 uS/cm
Velocity:	63.1 cm/s
pH:	6.76
Wetted Width:	13 m
Bankfull Width:	13 m
Depth:	44 cm

Waterbody Information - Retrieval

Temperature:	16.8 deg C
Dissolved Oxygen:	8.5 mg/l
Specific Conductance:	17 uS/cm
Velocity:	49 cm/s
pH:	6.41
Wetted Width:	13 m
Bankfull Width:	13 m
Depth:	37 cm

Water Chemistry

Summary of Habitat Characteristics

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

Landcover Summary - 2004 Data

Sample Comments



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report**

Station Number: S-999	Waterbody: Cupsuptic River - Station 999	Town: Upper Cupsuptic Twp
Log Number: 2201	Subsample Factor: X4	Replicates: 3
		Calculated: 1/29/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Pteronarcys</i>	09020205023		5.33	0	SH		0.8
<i>Pteronarcys biloba</i>	09020205023061	5.33			--	0.8	
Perlodidae	09020207	8.00	8.00		--	1.1	1.1
<i>Isoperla</i>	09020207026	4.00	4.00	2	PR	0.6	0.6
Chloroperlidae	09020208	1.33	1.33		--	0.2	0.2
Perlidae	09020209	2.67	2.67		--	0.4	0.4
<i>Agnetina</i>	09020209050		2.67	2	PR		0.4
<i>Agnetina capitata</i>	09020209050152	2.67		2	PR	0.4	
Baetidae	09020401	5.33			--	0.8	
<i>Baetis</i>	09020401001	4.00	55.38	4	CG	0.6	7.9
<i>Baetis flavistriga</i>	09020401001004	5.33			--	0.8	
<i>Baetis pluto</i>	09020401001009	41.33			--	5.9	
<i>Plauditus</i>	09020401012	6.67	7.29		CG	1.0	1.0
Heptageniidae	09020402	12.00			--	1.7	
<i>Heptagenia</i>	09020402010	8.00	18.29	2	SC	1.1	2.6
<i>Maccaffertium</i>	09020402015	1.33	3.05	4	SC	0.2	0.4
<i>Ephemerella</i>	09020410035	13.33	13.33	1	CG	1.9	1.9
<i>Serratella</i>	09020410037		8.00	2	CG		1.1
<i>Serratella serratoides</i>	09020410037124	8.00			--	1.1	
Hydropsychidae	09020604	38.67			--	5.5	
<i>Arctopsyche</i>	09020604012		1.58		CF		0.2
<i>Arctopsyche ladogensis</i>	09020604012022	1.33			--	0.2	
<i>Cheumatopsyche</i>	09020604015	1.33	1.58	5	CF	0.2	0.2
<i>Hydropsyche</i>	09020604016	177.33	243.50	4	CF	25.3	34.7
<i>Hydropsyche morosa</i>	09020604016030	1.33			--	0.2	
<i>Hydropsyche slossonae</i>	09020604016031	6.67			--	1.0	
<i>Hydropsyche sparna</i>	09020604016032	20.00			--	2.9	
<i>Rhyacophila</i>	09020605019	2.67	4.00	2	PR	0.4	0.6
<i>Rhyacophila acutiloba</i>	09020605019056	1.33			PR	0.2	
<i>Glossosoma</i>	09020606020	20.00	33.33	0	SC	2.9	4.8
<i>Glossosoma lividum</i>	09020606020067	2.67			--	0.4	
<i>Glossosoma nigrior</i>	09020606020068	10.67			SC	1.5	
<i>Protoptila</i>	09020606022	6.67	6.67	1	SC	1.0	1.0
<i>Brachycentrus</i>	09020609043		72.00	0	CF		10.3
<i>Brachycentrus americanus</i>	09020609043095	5.33			--	0.8	
<i>Brachycentrus appalachia</i>	09020609043096	66.67			--	9.5	
<i>Apatania</i>	09020610061	1.33	1.33		SC	0.2	0.2
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.2	0.2



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		Actual	Adjusted			Actual	Adjusted
<i>Ceraclea</i>	09020618072	1.33	1.33	3	CG	0.2	0.2
<i>Antocha</i>	09021001004	2.67	2.67	3	CG	0.4	0.4
<i>Hexatoma</i>	09021001008	2.67	2.67	2	PR	0.4	0.4
<i>Pagastia</i>	09021011025		2.67	1	--		0.4
<i>Pagastia orthogonia</i>	09021011025001	2.67			--	0.4	
<i>Cricotopus</i>	09021011037	1.33	5.33	7	SH	0.2	0.8
<i>Cricotopus bicinctus</i>	09021011037057	2.67			--	0.4	
<i>Cricotopus tremulus</i>	09021011037068	1.33			--	0.2	
<i>Eukiefferiella</i>	09021011041		5.33	8	CG		0.8
<i>Eukiefferiella brehmi group</i>	09021011041073	5.33			--	0.8	
<i>Orthocladius</i>	09021011050	1.33	1.33	6	CG	0.2	0.2
<i>Thienemanniella</i>	09021011062	1.33	13.33	6	CG	0.2	1.9
<i>Thienemanniella xena</i>	09021011062110	12.00			--	1.7	
<i>Tvetenia</i>	09021011065	1.33	22.67	5	CG	0.2	3.2
<i>Tvetenia vitracies</i>	09021011065113	12.00			--	1.7	
<i>Tvetenia paucunca</i>	09021011065114	9.33			--	1.3	
<i>Micropsectra</i>	09021011070	1.33	1.33	7	CG	0.2	0.2
<i>Rheotanytarsus</i>	09021011072	52.00	52.00	6	CF	7.4	7.4
<i>Tanytarsus</i>	09021011076	1.33	1.33	6	CF	0.2	0.2
<i>Polypedilum</i>	09021011102		42.67	6	SH		6.1
<i>Polypedilum aviceps</i>	09021011102181	42.67			--	6.1	
<i>Simulium</i>	09021012047		14.67	4	CF		2.1
<i>Simulium tuberosum</i>	09021012047067	14.67			--	2.1	
<i>Roederiodes</i>	09021016058	1.33	1.33	3	PR	0.2	0.2
<i>Promoresia</i>	09021113069		26.67		--		3.8
<i>Promoresia tardella</i>	09021113069052	26.67			--	3.8	
Hygrobatidae	09030102	1.33	1.33		--	0.2	0.2
<i>Ferrissia</i>	10010204035		8.00		SC		1.1
<i>Ferrissia rivularis</i>	10010204035066	8.00			--	1.1	