



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

Station Information

Station Number: S-501
Waterbody: Mopang Stream - Station 501
Town: T30 Md Bpp
Directions: DOWNSTREAM OF RT. 9 CROSSING

DEP Drainage: St. Croix - Coastal
HUC8: 01050002
HUC8 Name: Maine Coastal
Latitude: 44 52 13.51 N
Longitude: 67 56 27.73 W
Stream Order: 2

Sample Information

Log Number: 2055 Type of Sample: ROCK BAG Date Deployed: 7/25/2011
Subsample Factor: X1 Replicates: 3 Date Retrieved: 8/24/2011

Classification Attainment

Statutory Class: AA **Final Determination: A** Date: 2/13/2012
Model Result with P>.6: A **Reason for Determination: Model**
Date Last Calculated: 2/10/2012 Comments:

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.81	Class A, B, or C	1.00
Class B	0.19	Non-Attainment	0.00

B or Better Model		A Model	
Class A or B	1.00	Class A	0.99
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.01

Model Variables

01 Total Mean Abundance	149.33	18 Relative Abundance Ephemeroptera	0.17
02 Generic Richness	27.00	19 EPT Generic Richness	13.00
03 Plecoptera Mean Abundance	5.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	26.00	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	2.91	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	4.33
06 Hilsenhoff Biotic Index	3.25	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	24.30
07 Relative Abundance - Chironomidae	0.03	28 EP Generic Richness/14	0.50
08 Relative Generic Richness Diptera	0.30	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	62.33		
11 <i>Cheumatopsyche</i> Abundance	4.33		
12 EPT Generic Richness/ Diptera	1.63		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance	5.00		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	0.33		
(Family Functional Group)			
17 Chironomini Abundance (Family	1.33		
Functional Group)			

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	41.74
2	<i>Brachycentrus</i>	17.86
3	<i>Maccaffertium</i>	12.92
4	<i>Chimarra</i>	5.58
5	<i>Acroneuria</i>	3.35



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	24.7 deg C
Dissolved Oxygen:	8.1 mg/l
Specific Conductance:	14 uS/cm
Velocity:	39 cm/s
pH:	6.25
Wetted Width:	5 m
Bankfull Width:	6.4 m
Depth:	35 cm

Waterbody Information - Retrieval

Temperature:	22.4 deg C
Dissolved Oxygen:	8.5 mg/l
Specific Conductance:	12 uS/cm
Velocity:	36 cm/s
pH:	6.2
Wetted Width:	6.4 m
Bankfull Width:	6.4 m
Depth:	40 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Swamp Hardwood	Partly Open	Flat
Upland Conifer		
Upland Hardwood		

<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Below Wetland	Below Road Crossing	Boulder 5 %
	Below Wetland	Gravel 35 %
	Minimally Disturbed	Rubble/Cobble 55 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	12138	High Int. Dev. %	0.0	Water %	14.9	Non-vegetated %	1.6
		Med Int. Dev. %	0.0	Wetland %	4.9	Tilled Agriculture %	0.2
		Low Int. Dev. %	0.4	Upland Woody %	79.2	Grassland %	0.4
		Development %	0.4	Natural %	84.2	Human Altered %	0.9
						Impervious %	0.2

Sample Comments

WETLAND HABITAT UPSTREAM AND DOWNSTREAM OF SITE. CRITICAL SALMON HABITAT.
7/25/11: MACROPHYTES OBSERVED.
8/24/11: FISH, MACROPHYTES, AND A GREEN JELLY-LIKE SUBSTANCE OBSERVED.



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

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Town: T30 Md Bpp

Log Number: 2055

Subsample Factor: X1

Replicates: 3

Calculated: 2/10/2012

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Acroneuria</i>	09020209042	1.67	5.00	0	PR	1.1	3.3
<i>Acroneuria lycorias</i>	09020209042125	3.33			--	2.2	
<i>Boyeria</i>	09020301004		0.33	2	PR		0.2
<i>Boyeria vinosa</i>	09020301004012	0.33			--	0.2	
Gomphidae	09020302	0.33	0.33		--	0.2	0.2
Calopterygidae	09020307	0.33	0.33		--	0.2	0.2
<i>Acerpenna</i>	09020401007		4.00	5	CG		2.7
<i>Acerpenna pygmaea</i>	09020401007011	4.00			--	2.7	
<i>Iswaeon</i>	09020401015	1.33	1.33		--	0.9	0.9
Heptageniidae	09020402	1.00			--	0.7	
<i>Leucrocota</i>	09020402011	0.67	0.70	1	SC	0.4	0.5
<i>Maccaffertium</i>	09020402015	12.33	19.30	4	SC	8.3	12.9
<i>Maccaffertium luteum</i>	09020402015049	4.00			--	2.7	
<i>Maccaffertium modestum</i>	09020402015051	2.00			--	1.3	
Leptophlebiidae	09020406	0.33	0.33		--	0.2	0.2
<i>Eurylophella</i>	09020410036	0.33	0.33	3	CG	0.2	0.2
<i>Chimarra</i>	09020601003	8.33	8.33	2	CF	5.6	5.6
<i>Neureclipsis</i>	09020603008	1.67	1.67	7	CF	1.1	1.1
<i>Cheumatopsyche</i>	09020604015	4.33	4.33	5	CF	2.9	2.9
<i>Hydropsyche</i>	09020604016	14.33	62.33	4	CF	9.6	41.7
<i>Hydropsyche bronta</i>	09020604016029	0.33			--	0.2	
<i>Hydropsyche sparna</i>	09020604016032	6.33			--	4.2	
<i>Hydropsyche depravata complex</i>	09020604016041	41.33			CF	27.7	
<i>Brachycentrus</i>	09020609043		26.67	0	CF		17.9
<i>Brachycentrus numerosus</i>	09020609043098	26.67			--	17.9	
<i>Oecetis</i>	09020618078		3.00	8	PR		2.0
<i>Oecetis persimilis</i>	09020618078157	3.00			--	2.0	
<i>Nilotanytus</i>	09021011012		0.33	6	PR		0.2
<i>Nilotanytus fimbriatus</i>	09021011012027	0.33			--	0.2	
<i>Psectrocladius</i>	09021011056		0.67	8	CG		0.4
<i>Psectrocladius elatus</i>	09021011056105	0.67			--	0.4	
<i>Rheotanytarsus</i>	09021011072	2.33	2.33	6	CF	1.6	1.6
<i>Microtendipes</i>	09021011094		1.00	6	CF		0.7
<i>Microtendipes rydalensis group</i>	09021011094168	1.00			--	0.7	
<i>Polypedilum</i>	09021011102		0.33	6	SH		0.2
<i>Polypedilum flavum</i>	09021011102182	0.33			--	0.2	
<i>Simulium</i>	09021012047	0.33	3.67	4	CF	0.2	2.5
<i>Simulium fibrinflatum</i>	09021012047059	0.33			--	0.2	



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<i>Simulium jenningsi complex</i>	09021012047070	0.67			CF	0.4	
<i>Simulium venustum/verecundum complex</i>	09021012047072	2.33			CF	1.6	
<i>Atherix</i>	09021015055	0.33	0.33	2	PR	0.2	0.2
<i>Hemerodromia</i>	09021016057	0.33	0.33	3	PR	0.2	0.2
<i>Macronychus</i>	09021113065		0.67	4	--		0.4
<i>Macronychus glabratus</i>	09021113065040	0.67			--	0.4	
<i>Optioservus</i>	09021113067		0.33	3	SC		0.2
<i>Optioservus ovalis</i>	09021113067046	0.33			--	0.2	
<i>Stenelmis</i>	09021113070		1.00	5	SC		0.7
<i>Stenelmis crenata</i>	09021113070055	1.00			--	0.7	