



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

Station Information

Station Number: S-852
Waterbody: Moose River - Station 852
Town: Rockwood Strip T01 R01 Nbkp
Directions: APPROXIMATELY 1000 FEET BELOW BRASSUA DAM; MID-CHANNEL; DS-2
DEP Drainage: Kennebec
HUC8: 01030001
HUC8 Name: Upper Kennebec
Latitude: 45 39 45.33 N
Longitude: 69 48 40.73 W
Stream Order: 4

Sample Information

Log Number: 2178
Subsample Factor: X4
Type of Sample: ROCK BAG
Replicates: 3
Date Deployed: 8/18/2010
Date Retrieved: 9/16/2010

Classification Attainment

Statutory Class: A
Model Result with P>.6: C
Date Last Calculated: 3/28/2013
Final Determination: B
Reason for Determination: Best Professional Judgement
Date: 4/8/2013
Comments: Lake Outlet Effect. Raised indeterminate class B (0.42) to class B

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.02	Class C	0.39	Class A, B, or C	1.00
Class B	0.58	NA	0.00	Non-Attainment	0.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B		0.42		Class A	0.04
Class C or Non-Attainment		0.58		Class B or C or Non-Attainment	0.96

Model Variables

01 Total Mean Abundance	1776.00	18 Relative Abundance Ephemeroptera	0.13
02 Generic Richness	21.00	19 EPT Generic Richness	13.00
03 Plecoptera Mean Abundance	30.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	228.00	23 Relative Generic Richness- Plecoptera	0.14
05 Shannon-Wiener Generic Diversity	1.64	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	59.49
06 Hilsenhoff Biotic Index	3.83	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	5.33
07 Relative Abundance - Chironomidae	0.06	28 EP Generic Richness/14	0.50
08 Relative Generic Richness Diptera	0.24	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	1319.18		
11 <i>Cheumatopsyche</i> Abundance	22.16		
12 EPT Generic Richness/ Diptera Generic Richness	2.60		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	22.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	0.00		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	74.28
2	<i>Ephemerella</i>	7.87
3	<i>Plauditus</i>	4.13
4	<i>Tvetenia</i>	3.90
5	<i>Cricotopus</i>	2.10



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Station Number: S-852	Town: Rockwood Strip T01 R01 Nbkp	Date Deployed: 8/18/2010
Log Number: 2178	Waterbody: Moose River - Station 852	Date Retrieved: 9/16/2010

Sample Collection and Processing Information

Sampling Organization: LOTIC INC.

Taxonomist: LOTIC INC.

Waterbody Information - Deployment

Temperature:	22.9 deg C
Dissolved Oxygen:	8.1 mg/l
Specific Conductance:	21.9 uS/cm
Velocity:	69 cm/s
pH:	8.2
Wetted Width:	40 m
Bankfull Width:	40 m
Depth:	48 cm

Waterbody Information - Retrieval

Temperature:	15.8 deg C
Dissolved Oxygen:	8.4 mg/l
Specific Conductance:	24.7 uS/cm
Velocity:	65 cm/s
pH:	8.6
Wetted Width:	40 m
Bankfull Width:	40 m
Depth:	48 cm

Water Chemistry

Summary of Habitat Characteristics

Landuse Name

Upland Conifer

Upland Hardwood

Potential Stressor

Canopy Cover

Open

Location

Below Dam

Terrain

Rolling

Substrate

Boulder	50 %
Gravel	10 %
Rubble/Cobble	40 %

Landcover Summary - 2004 Data

Total Area (ac)	458310	High Int. Dev. %	0.1	Water %	5.3	Non-vegetated %	0.5
		Med Int. Dev. %	0.0	Wetland %	5.8	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.5	Upland Woody %	87.8	Grassland %	0.1
		Development %	0.6	Natural %	93.8	Human Altered %	1.0
						Impervious %	0.3

Sample Comments



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

Station Number: S-852	Waterbody: Moose River - Station 852	Town: Rockwood Strip T01 R01 N
Log Number: 2178	Subsample Factor: X4	Replicates: 3
		Calculated: 3/28/2013

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Naididae	08020202	2.67	2.67		--	0.2	0.2
<i>Erpobdella</i>	08030203002		1.33		--		0.1
<i>Erpobdella obscura</i>	08030203002006	1.33			--	0.1	
Perlodidae	09020207	8.00	8.00		--	0.5	0.5
Perlidae	09020209	1.33	1.33		--	0.1	0.1
<i>Paragnetina</i>	09020209049	21.33	21.33	1	PR	1.2	1.2
<i>Plauditus</i>	09020401012	73.33	73.33		CG	4.1	4.1
<i>Maccaffertium</i>	09020402015	5.33	5.33	4	SC	0.3	0.3
Ephemerellidae	09020410	2.67			--	0.2	
<i>Ephemerella</i>	09020410035	137.33	139.83	1	CG	7.7	7.9
<i>Serratella</i>	09020410037	9.33	9.50	2	CG	0.5	0.5
Polycentropodidae	09020603	21.33	21.33		--	1.2	1.2
<i>Neureclipsis</i>	09020603008	9.33	9.33	7	CF	0.5	0.5
Hydropsychidae	09020604	292.00			--	16.4	
<i>Cheumatopsyche</i>	09020604015	17.33	22.16	5	CF	1.0	1.2
<i>Hydropsyche</i>	09020604016	1032.00	1319.18	4	CF	58.1	74.3
<i>Rhyacophila</i>	09020605019	1.33	1.33	2	PR	0.1	0.1
<i>Ceraclea</i>	09020618072	2.67	2.67	3	CG	0.2	0.2
<i>Cricotopus</i>	09021011037		37.33	7	SH		2.1
<i>Cricotopus bicinctus</i>	09021011037057	37.33			--	2.1	
<i>Eukiefferiella</i>	09021011041		1.33	8	CG		0.1
<i>Eukiefferiella devonica group</i>	09021011041083	1.33			CG	0.1	
<i>Nanocladius</i>	09021011049	5.33	5.33	3	CG	0.3	0.3
<i>Tvetenia</i>	09021011065		69.33	5	CG		3.9
<i>Tvetenia vitracies</i>	09021011065113	69.33			--	3.9	
<i>Simulium</i>	09021012047	21.33	21.33	4	CF	1.2	1.2
Ancylidae	10010204	2.67	2.67		SC	0.2	0.2