



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

Station Information

Station Number: S-1251 River Basin:
Waterbody: West Branch Penobscot River - Station 1251 HUC8 Name:
Town: Millinocket Latitude:
Directions: DOWNSTREAM OF STONE DAM IN SOUTHWEST CHANNEL (RIVER RIGHT) Longitude:
Stream Order: 5

Sample Information

Log Number: 3100 Type of Sample: ROCK BASKET Date Deployed: 8/2/2023
Subsample Factor: X1 Replicates: 3 Date Retrieved: 8/30/2023

Classification Attainment

Statutory Class: C Final Determination: A Date: 6/7/2024
Model Result with $P \geq 0.6$: A Reason for Determination: Model
Date Last Calculated: 4/26/2024 Comments:

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.29	Class A, B, or C	1.00
Class B	0.69	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	1.00	Class A	0.84
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.16

Model Variables

01 Total Mean Abundance	1658.00	18 Relative Abundance Ephemeroptera	0.11
02 Generic Richness	43.00	19 EPT Generic Richness	21.00
03 Plecoptera Mean Abundance	4.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	184.33	23 Relative Generic Richness- Plecoptera	0.07
05 Shannon-Wiener Generic Diversity	1.55	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	2.70
06 Hilsenhoff Biotic Index	3.97	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	58.92
07 Relative Abundance - Chironomidae	0.04	28 EP Generic Richness/14	0.93
08 Relative Generic Richness Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	70.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
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)	4.05		
17 Chironomini Abundance (Family Functional Group)	10.14		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Simulium</i>	77.86
2	<i>Serratella</i>	4.42
3	<i>Hydropsyche</i>	4.22
4	<i>Maccaffertium</i>	3.36
5	<i>Baetis</i>	2.31



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Station Number: S-1251 Town: Millinocket Date Deployed: 8/2/2023
Log Number: 3100 Waterbody: West Branch Penobscot River - Station 1251 Date Retrieved: 8/30/2023

Sample Collection and Processing Information

Sampling Organization: NORMANDEAU ASSOCIATES

Taxonomist: NORMANDEAU ASSOCIATES

Waterbody Information - Deployment

Temperature: 22.6 deg C
Dissolved Oxygen: 8.59 mg/l
Dissolved Oxygen Saturation: 96.5 %
Specific Conductance: 25.6 uS/cm
Velocity: 40.5 cm/s
pH: 6.87
Wetted Width: 49 m
Bankfull Width:
Depth: 46 cm

Waterbody Information - Retrieval

Temperature: 20.9 deg C
Dissolved Oxygen: 8.73 mg/l
Dissolved Oxygen Saturation: 94.9 %
Specific Conductance: 25.8 uS/cm
Velocity: 39 cm/s
pH: 6.95
Wetted Width: 49 m
Bankfull Width:
Depth: 46 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Conifer	Open	Rolling
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Regulated Flows	Below Dam	Boulder 35 %
	Main Stem	Gravel 12.5 %
		Rubble/Cobble 50 %
		Sand 2.5 %

Landcover Summary - 2004 Data

Sample Comments

DOWNSTREAM OF STONE DAM IN SOUTHWEST CHANNEL, TDS 17PPM
TDS 17PPM



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Aquatic Life Taxonomic Inventory Report

Station Number: S-1251 Waterbody: West Branch Penobscot River - Station 1251 Town: Millinocket
Log Number: 3100 Subsample Factor: X1 Replicates: 3 Calculated: 4/26/2024

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Manayunkia</i>	08010101001	0.67	0.67		--	0.0	0.0
<i>Limnodrilus</i>	08020202022	0.33	0.33		CG	0.0	0.0
<i>Isoperla</i>	09020207026	0.33	0.33	2	PR	0.0	0.0
Perlidae	09020209	0.33			--	0.0	
<i>Acroneuria</i>	09020209042	0.67	3.25	0	PR	0.0	0.2
<i>Acroneuria abnormis</i>	09020209042121	2.33		0	PR	0.1	
<i>Paragnetina</i>	09020209049	1.00	1.08	1	PR	0.1	0.1
Corduliidae	09020305	0.33	0.33		--	0.0	0.0
<i>Baetis</i>	09020401001	38.33	38.33	4	CG	2.3	2.3
<i>Acerpenna</i>	09020401007	0.67	0.67	5	CG	0.0	0.0
<i>Plauditus</i>	09020401012	3.33	3.33		CG	0.2	0.2
<i>Dipheter</i>	09020401013	0.67	0.67		--	0.0	0.0
<i>Epeorus</i>	09020402009	1.33	1.33	0	SC	0.1	0.1
<i>Leucrocuta</i>	09020402011	1.00	1.00	1	SC	0.1	0.1
<i>Maccaffertium</i>	09020402015	55.67	55.67	4	SC	3.4	3.4
<i>Isonychia</i>	09020404018	9.33	9.33	2	CF	0.6	0.6
<i>Hexagenia</i>	09020407028	0.67	0.67	6	CG	0.0	0.0
<i>Serratella</i>	09020410037	73.33	73.33	2	CG	4.4	4.4
<i>Chimarra</i>	09020601003	8.67	8.67	2	CF	0.5	0.5
<i>Neureclipsis</i>	09020603008	3.67	3.67	7	CF	0.2	0.2
<i>Nyctiophylax</i>	09020603009	1.67	1.67	5	PR	0.1	0.1
<i>Polycentropus</i>	09020603010	6.33	6.33	6	PR	0.4	0.4
<i>Hydropsyche</i>	09020604016	29.00	70.00	4	CF	1.7	4.2
<i>Hydropsyche morosa</i>	09020604016030	40.67			--	2.5	
<i>Hydropsyche slossonae</i>	09020604016031	0.33			--	0.0	
<i>Macrostemum</i>	09020604018	0.33	0.33	3	CF	0.0	0.0
<i>Hydroptila</i>	09020607026	0.67	0.67	6	P	0.0	0.0
<i>Oecetis</i>	09020618078	3.00	3.00	8	PR	0.2	0.2
<i>Corydalus</i>	09020701002	0.67	0.67	6	PR	0.0	0.0
Lepidoptera	090209	0.33	0.33		--	0.0	0.0
Tipulidae	09021001	5.00	5.00		--	0.3	0.3
Chironomidae	09021011	1.00			--	0.1	
<i>Labrundinia</i>	09021011008	0.33	0.34	7	PR	0.0	0.0
<i>Nilotanytus</i>	09021011012	0.67	0.68	6	PR	0.0	0.0
<i>Procladius</i>	09021011015	0.33	0.34	9	PR	0.0	0.0
<i>Thienemannimyia</i>	09021011020		2.70	3	PR		0.2
<i>Thienemannimyia group</i>	09021011020041	2.67			--	0.2	



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		Actual	Adjusted			Actual	Adjusted
<i>Cricotopus</i>	09021011037	2.67	2.70	7	SH	0.2	0.2
<i>Epoicocladus</i>	09021011040	0.33	0.34	4	CG	0.0	0.0
<i>Eukiefferiella</i>	09021011041		0.68	8	CG		0.0
<i>Eukiefferiella gracei group</i>	09021011041079	0.67			--	0.0	
<i>Parametriocnemus</i>	09021011053	0.67	0.68	5	CG	0.0	0.0
<i>Tvetenia</i>	09021011065		34.80	5	CG		2.1
<i>Tvetenia vitracies</i>	09021011065113	34.33			--	2.1	
<i>Rheotanytarsus</i>	09021011072	13.00	20.95	6	CF	0.8	1.3
<i>Rheotanytarsus exiguus group</i>	09021011072127	2.67			CF	0.2	
<i>Rheotanytarsus pellucidus</i>	09021011072128	5.00			CF	0.3	
<i>Phaenopsectra</i>	09021011101	0.33	0.34	7	SC	0.0	0.0
<i>Polypedilum</i>	09021011102		9.80	6	SH		0.6
<i>Polypedilum aviceps</i>	09021011102181	0.33			--	0.0	
<i>Polypedilum flavum</i>	09021011102182	4.33			--	0.3	
<i>Polypedilum halterale group</i>	09021011102193	0.33			--	0.0	
<i>Polypedilum illinoense</i>	09021011102204	4.67			--	0.3	
<i>Simulium</i>	09021012047	1291.00	1291.00	4	CF	77.9	77.9
<i>Stenelmis</i>	09021113070	0.33	0.33	5	SC	0.0	0.0
Hydrobiidae	10010104	0.33	0.33		--	0.0	0.0
<i>Pisidium</i>	10020201002	1.33	1.33		CF	0.1	0.1