



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

Station Information

Station Number: S-1235 River Basin: Penobscot
Waterbody: Millinocket Stream - Station 1235 HUC8 Name: West Branch Penobscot
Town: Millinocket Latitude: 45° 44' 30.889" N
Directions: IMMEDIATELY DOWNSTREAM AT MILLINOCKET Longitude: 68° 43' 59.676" W
LAKE DAM, RIVER RIGHT. Stream Order: 4

Sample Information

Log Number: 3171 Type of Sample: ROCK BAG Date Deployed: 7/25/2024
Subsample Factor: X1 Replicates: 3 Date Retrieved: 8/22/2024

Classification Attainment

Statutory Class: A Final Determination: C Date: 9/10/2025
Model Result with $P \geq 0.6$: C Reason for Determination: Model
Date Last Calculated: 5/29/2025 Comments:

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.00	Class A, B, or C	1.00
Class B	0.28	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	0.10	Class A	0.08
Class C or Non-Attainment	0.90	Class B or C or Non-Attainment	0.92

Model Variables

01 Total Mean Abundance	4833.67	18 Relative Abundance Ephemeroptera	0.04
02 Generic Richness	28.00	19 EPT Generic Richness	17.00
03 Plecoptera Mean Abundance	66.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	194.33	23 Relative Generic Richness- Plecoptera	0.07
05 Shannon-Wiener Generic Diversity	2.75	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	1558.67
06 Hilsenhoff Biotic Index	4.74	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	120.33
07 Relative Abundance - Chironomidae	0.10	28 EP Generic Richness/14	0.71
08 Relative Generic Richness Diptera	0.14	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	1647.00		
11 <i>Cheumatopsyche</i> Abundance	1114.67		
12 EPT Generic Richness/ Diptera Generic Richness	4.25		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	66.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	50.67		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	34.07
2	<i>Cheumatopsyche</i>	23.06
3	Planariidae	17.30
4	<i>Cricotopus</i>	9.19
5	<i>Neureclipsis</i>	5.44



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Station Number: S-1235 Town: Millinocket Date Deployed: 7/25/2024
Log Number: 3171 Waterbody: Millinocket Stream - Station 1235 Date Retrieved: 8/22/2024

Sample Collection and Processing Information

Sampling Organization: MOODY MOUNTAIN
ENVIRONMENTAL

Taxonomist: PAUL LEEPER (MOODY MOUNTAIN
ENVIRONMENTAL)

Waterbody Information - Deployment

Temperature: 19.9 deg C
Dissolved Oxygen: 8.6 mg/l
Dissolved Oxygen Saturation:
Specific Conductance:
Velocity: 110 cm/s
pH:
Wetted Width: 25 m
Bankfull Width:
Depth: 37 cm

Waterbody Information - Retrieval

Temperature: 21.9 deg C
Dissolved Oxygen: 8.8 mg/l
Dissolved Oxygen Saturation:
Specific Conductance:
Velocity: 100 cm/s
pH:
Wetted Width: 25 m
Bankfull Width:
Depth: 30 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 40 %
	Main Stem	Gravel 10 %
		Rubble/Cobble 50 %

Landcover Summary - 2004 Data

Total Area (ac)	78436	High Int. Dev. %	1.9	Water %	13.1	Non-vegetated %	0.4
		Med Int. Dev. %	0.0	Wetland %	5.9	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.0	Upland Woody %	77.1	Grassland %	0.1
		Development %	1.9	Natural %	83.3	Human Altered %	1.9
						Impervious %	0.2
Total Land (ac)	68147	High Int. Dev. %	2.1	Water %	N/A	Non-vegetated %	N/A
		Med Int. Dev. %	0.0	Wetland %	6.7	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.0	Upland Woody %	88.7	Grassland %	0.1
		Development %	2.2	Natural %	95.9	Human Altered %	2.2
						Impervious %	0.2

Sample Comments

IMMEDIATELY DOWNSTREAM AT MILLINOCKET LAKE DAM, RIVER RIGHT, TDS 14 PPM
TDS 16 PPM



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

Station Number: S-1235

Waterbody: Millinocket Stream - Station 1235

Town: Millinocket

Log Number: 3171

Subsample Factor: X1

Replicates: 3

Calculated: 5/29/2025

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Planariidae	03010101	836.00	836.00		--	17.3	17.3
<i>Acroneuria</i>	09020209042	23.33	23.33	0	PR	0.5	0.5
<i>Paragnetina</i>	09020209049	43.00	43.00	1	PR	0.9	0.9
Odonata	090203	0.67	0.67		--	0.0	0.0
<i>Baetis</i>	09020401001	37.33	37.33	4	CG	0.8	0.8
<i>Heterocloeon</i>	09020401005	51.00	51.00	2	SC	1.1	1.1
<i>Maccaffertium</i>	09020402015	93.00	93.00	4	SC	1.9	1.9
<i>Stenonema</i>	09020402016	4.00	4.00	4	SC	0.1	0.1
<i>Isonychia</i>	09020404018	0.33	0.33	2	CF	0.0	0.0
<i>Eurylophella</i>	09020410036	6.00	6.00	3	CG	0.1	0.1
<i>Serratella</i>	09020410037	1.33	1.33	2	CG	0.0	0.0
<i>Tricorythodes</i>	09020411038	1.33	1.33	4	CG	0.0	0.0
<i>Chimarra</i>	09020601003	21.67	21.67	2	CF	0.4	0.4
<i>Neureclipsis</i>	09020603008	263.00	263.00	7	CF	5.4	5.4
<i>Polycentropus</i>	09020603010	18.00	18.00	6	PR	0.4	0.4
<i>Cheumatopsyche</i>	09020604015	1114.67	1114.67	5	CF	23.1	23.1
<i>Hydropsyche</i>	09020604016	1647.00	1647.00	4	CF	34.1	34.1
<i>Macrostemum</i>	09020604018	91.33	91.33	3	CF	1.9	1.9
<i>Oecetis</i>	09020618078	4.67	4.67	8	PR	0.1	0.1
<i>Corydalus</i>	09020701002	7.67	7.67	6	PR	0.2	0.2
<i>Cricotopus</i>	09021011037	444.00	444.00	7	SH	9.2	9.2
<i>Nanocladius</i>	09021011049	5.33	5.33	3	CG	0.1	0.1
<i>Polypedilum</i>	09021011102	50.67	50.67	6	SH	1.0	1.0
Simuliidae	09021012				--		
<i>Simulium</i>	09021012047	37.67	37.67	4	CF	0.8	0.8
<i>Ancyronyx</i>	09021113063	7.33	7.33	6	--	0.2	0.2
<i>Stenelmis</i>	09021113070	4.33	4.33	5	SC	0.1	0.1
Gastropoda	1001	1.33	1.33		--	0.0	0.0
<i>Pisidium</i>	10020201002	17.67	17.67		CF	0.4	0.4