



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

Station Information

Station Number: S-1230 River Basin: Penobscot
Waterbody: West Branch Penobscot River - Station 1230 HUC8 Name: West Branch Penobscot
Town: Millinocket Latitude: 45° 52' 11.427" N
Directions: DOWNSTREAM OF AMBERJACKAWOCKAMUS FALLS, RIVER RIGHT Longitude: 69° 06' 39.430" W
Stream Order: 5

Sample Information

Log Number: 3174 Type of Sample: ROCK BAG Date Deployed: 7/24/2024
Subsample Factor: X1 Replicates: 3 Date Retrieved: 8/21/2024

Classification Attainment

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

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.09	Class A, B, or C	1.00
Class B	0.78	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	0.99	Class A	0.70
Class C or Non-Attainment	0.01	Class B or C or Non-Attainment	0.30

Model Variables

01 Total Mean Abundance	1634.67	18 Relative Abundance Ephemeroptera	0.16
02 Generic Richness	31.00	19 EPT Generic Richness	21.00
03 Plecoptera Mean Abundance	23.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	262.33	23 Relative Generic Richness- Plecoptera	0.06
05 Shannon-Wiener Generic Diversity	3.28	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	439.00
06 Hilsenhoff Biotic Index	4.56	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	36.33
07 Relative Abundance - Chironomidae	0.31	28 EP Generic Richness/14	0.79
08 Relative Generic Richness Diptera	0.19	30 Presence of Class A Indicator Taxa/7	0.71
09 <i>Hydropsyche</i> Abundance	502.67		
11 <i>Cheumatopsyche</i> Abundance	193.33		
12 EPT Generic Richness/ Diptera Generic Richness	3.50		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	23.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	10.67		
17 Chironomini Abundance (Family Functional Group)	242.67		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	30.75
2	<i>Cricotopus</i>	14.78
3	<i>Polypedilum</i>	14.60
4	<i>Cheumatopsyche</i>	11.83
5	<i>Heterocloeon</i>	5.77



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Station Number: S-1230 Town: Millinocket Date Deployed: 7/24/2024
Log Number: 3174 Waterbody: West Branch Penobscot River - Station 1230 Date Retrieved: 8/21/2024

Sample Collection and Processing Information

Sampling Organization: MOODY MOUNTAIN
ENVIRONMENTAL

Taxonomist: PAUL LEEPER (MOODY MOUNTAIN
ENVIRONMENTAL)

Waterbody Information - Deployment

Temperature: 21.9 deg C
Dissolved Oxygen: 8.6 mg/l
Dissolved Oxygen Saturation:
Specific Conductance:
Velocity: 90 cm/s
pH:
Wetted Width: 56 m
Bankfull Width: 75 m
Depth: 27 cm

Waterbody Information - Retrieval

Temperature: 20.9 deg C
Dissolved Oxygen: 9 mg/l
Dissolved Oxygen Saturation:
Specific Conductance:
Velocity: 80 cm/s
pH:
Wetted Width: 56 m
Bankfull Width: 75 m
Depth: 34 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	Main Stem	Gravel 30 % Rubble/Cobble 60 % Sand 10 %

Landcover Summary - 2004 Data

Total Area (ac)	919473	High Int. Dev. %	0.5	Water %	5.5	Non-vegetated %	0.2
		Med Int. Dev. %	0.0	Wetland %	6.7	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.0	Upland Woody %	85.6	Grassland %	0.2
		Development %	0.5	Natural %	92.6	Human Altered %	0.5
						Impervious %	0.2
Total Land (ac)	868947	High Int. Dev. %	0.6	Water %	N/A	Non-vegetated %	N/A
		Med Int. Dev. %	0.0	Wetland %	7.1	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.0	Upland Woody %	90.6	Grassland %	0.2
		Development %	0.6	Natural %	98.0	Human Altered %	0.6
						Impervious %	0.2

Sample Comments

1000CFS



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Aquatic Life Taxonomic Inventory Report

Station Number: S-1230 Waterbody: West Branch Penobscot River - Station 1230 Town: Millinocket
Log Number: 3174 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	32.33	32.33		--	2.0	2.0
<i>Acroneuria</i>	09020209042	7.00	7.00	0	PR	0.4	0.4
<i>Paragnetina</i>	09020209049	16.00	16.00	1	PR	1.0	1.0
<i>Erythemis</i>	09020306031	0.33	0.33		PR	0.0	0.0
<i>Baetis</i>	09020401001	12.00	12.00	4	CG	0.7	0.7
<i>Heterocloeon</i>	09020401005	94.33	94.33	2	SC	5.8	5.8
<i>Acerpenna</i>	09020401007	1.00	1.00	5	CG	0.1	0.1
<i>Plautidus</i>	09020401012	66.67	66.67		CG	4.1	4.1
<i>Epeorus</i>	09020402009	26.00	26.00	0	SC	1.6	1.6
<i>Maccaffertium</i>	09020402015	24.00	24.00	4	SC	1.5	1.5
<i>Stenonema</i>	09020402016	5.33	5.33	4	SC	0.3	0.3
<i>Eurylophella</i>	09020410036	27.33	27.33	3	CG	1.7	1.7
<i>Serratella</i>	09020410037	5.67	5.67	2	CG	0.3	0.3
<i>Chimarra</i>	09020601003	54.33	54.33	2	CF	3.3	3.3
<i>Neureclipsis</i>	09020603008	1.67	1.67	7	CF	0.1	0.1
<i>Cheumatopsyche</i>	09020604015	193.33	193.33	5	CF	11.8	11.8
<i>Hydropsyche</i>	09020604016	502.67	502.67	4	CF	30.8	30.8
<i>Macrostemum</i>	09020604018	34.33	34.33	3	CF	2.1	2.1
<i>Rhyacophila</i>	09020605019	3.00	3.00	2	PR	0.2	0.2
<i>Glossosoma</i>	09020606020	1.67	1.67	0	SC	0.1	0.1
Hydroptilidae	09020607	5.33	5.33		--	0.3	0.3
<i>Brachycentrus</i>	09020609043	7.33	7.33	0	CF	0.4	0.4
<i>Oecetis</i>	09020618078	4.33	4.33	8	PR	0.3	0.3
<i>Thienemannimyia</i>	09021011020		10.67	3	PR		0.7
<i>Thienemannimyia group</i>	09021011020041	10.67			--	0.7	
<i>Cricotopus</i>	09021011037	241.67	241.67	7	SH	14.8	14.8
<i>Tanytarsus</i>	09021011076	4.00	4.00	6	CF	0.2	0.2
<i>Chironomus</i>	09021011080	4.00	4.00	10	CG	0.2	0.2
<i>Polypedilum</i>	09021011102	238.67	238.67	6	SH	14.6	14.6
<i>Hemerodromia</i>	09021016057	1.67	1.67	3	PR	0.1	0.1
Gastropoda	1001	6.00	6.00		--	0.4	0.4
<i>Pisidium</i>	10020201002	2.00	2.00		CF	0.1	0.1