

**Maine Department of Environmental Protection
Biological Monitoring Unit
BioME Aquatic Life Classification Attainment Report**

Station Information

Station Number: S512	DEP Drainage:	Penobscot
Waterbody: Penjajawoc Stream	HUC Code:	01020005
Town: Bangor	HUC Name:	Lower Penobscot
Directions: Borders site	Latitude:	Deg Min Sec
	Longitude:	Deg Min Sec
	Stream Order:	

Sample Information

Log Number: 1150	Type of Sample:	Riffle Bags	Date Deployed:	19-JUL-02
Subsample Factor: X1	Replicates:	3	Date Retrieved:	16-AUG-02

Classification Attainment

Statutory Class:	B	Final Determination:	NA
Model Result with P > .6	NA	Reason for Determination:	
Date Last Calculated:			

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.00	Class A, B, or C	0.00
Class B	0.00	Non-Attainment	1.00
	Class C		
	0.05		
	Class NA		
	0.95		
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.00	Class A	0.01
Class C or Non-Attainment	1.00	Class B or C or Non-Attainment	0.99

Model Variables

01 Total Abundance of Individuals	162.67	18 Relative Abundance - Ephemeroptera	0.00
02 Generic Richness	47.00	19 EPT Generic Richness	6.00
03 Plecoptera Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	5.07
04 Ephemeroptera Abundance	0.33	<i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	
05 Shannon - Wiener Diversity	3.50	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	6.75	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	1.72
07 Relative Abundance - Chironomidae	0.25	<i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.34	26 Sum of Abundances: Acroneuria, Stenonema	0.00
09 <i>Hydropsyche</i> Abundance	0.33	28 EP Generic Richness/14	0.07
11 <i>Cheumatopsyche</i> Abundance	0.33	30 Presence of a Indicator Taxa/7	0.00
12 EPT Generic Richness/ Diptera Generic Richness	0.38		

Five Most Dominant Taxa

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.02	1	Caecidotea	36.89
15 Perlidae Abundance (Family Functional Group)	0.00	2	Rheotanytarsus	20.53
16 Tanypodinae Abundance (Family Functional Group)	1.74	3	Stenelmis	5.68
17 Chironomini Abundance (Family Functional Group)	0.70	4	Phagocata	3.89
		5	Dubiraphia	3.28

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Biological Monitoring Unit
BioME Aquatic Life Classification Attainment Report**

Station Number	S512	Waterbody: Penjajawoc Stream	Date Deployed: 19-JUL-02
Log Number:	1150	Town: Bangor	Date Retrieved: 16-AUG-02

Sample Collection and Processing Information

Sampling Organization:
Taxonomist: Michael Winnell

Waterbody Information

Water Temperature:	19.1 °C	Specific Conductance	320.0 mS/cm	Channel Width:	2.5 m
Velocity:	15 cm/s	Dissolved Oxygen:	8.0 ppm	Channel Depth:	15.0 cm

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Stressor</u>	<u>Location</u>
Swamp Hardwood Urban	Partly Open		Not Designated

Substrate

Rubble	Gravel	Sand
10%	60%	30%

Comments about the Station or Sample

Comments about the Final Determination

**Maine Department of Environmental Protection
Biological Monitoring Unit**

StationNumber: S512 **Waterbody:** Penjajawoc Stream **Town:** Bangor
Lognum: 1150 **Subsample Factor:** X1 **Replicates:** 3 **Calculated:**

BioME Aquatic Life Taxonomic Inventory Report

Taxa	Code	Count		Biotic Index Value	Functional Feeding Group	Relative Abundance	
		(Average of Baskets)				Actual	Adjusted
		Actual	Adjusted				
<i>Phagocata</i>	03010101004	0.0	6.3		--	0.0	3.9
<i>Phagocata gracilis</i>	03010101004001	6.3	0.0		--	3.9	0.0
<i>Nais</i>	08020202009	0.0	0.3		CG	0.0	0.2
<i>Nais pardalis</i>	08020202009007	0.3	0.0		--	0.2	0.0
<i>Tubificidae</i>	08020203	2.7	2.7		--	1.6	1.6
<i>Aulodrilus</i>	08020203001	0.0	0.3		--	0.0	0.2
<i>Aulodrilus limnobioides</i>	08020203001002	0.3	0.0		--	0.2	0.0
<i>Helobdella</i>	08030101005	2.7	3.3		--	1.6	2.0
<i>Helobdella triseriata</i>	08030101005005	0.7	0.0		--	0.4	0.0
<i>Placobdella</i>	08030101006	0.0	1.7		--	0.0	1.0
<i>Placobdella papillifera</i>	08030101006003	1.7	0.0		--	1.0	0.0
<i>Mooreobdella</i>	08030301003	0.0	1.0		--	0.0	0.6
<i>Mooreobdella fervida</i>	08030301003001	0.7	0.0		--	0.4	0.0
<i>Mooreobdella melanostoma</i>	08030301003002	0.3	0.0		--	0.2	0.0
<i>Caecidotea</i>	09010101001	36.7	60.0	8	SH	22.5	36.9
<i>Caecidotea communis</i>	09010101001001	23.3	0.0		--	14.3	0.0
<i>Hyaella</i>	09010203006	0.0	4.7	8	CG	0.0	2.9
<i>Hyaella azteca</i>	09010203006011	4.7	0.0		--	2.9	0.0
<i>Collembola</i>	090201	1.3	1.3		--	0.8	0.8
<i>Aeshnidae</i>	09020301	0.3	0.3		--	0.2	0.2
<i>Calopteryx</i>	09020307043	0.0	0.3	5	PR	0.0	0.2
<i>Calopteryx maculata</i>	09020307043088	0.3	0.0		--	0.2	0.0
<i>Coenagrionidae</i>	09020309	2.3	2.3		--	1.4	1.4
<i>Ischnura</i>	09020309052	0.7	0.7	9	PR	0.4	0.4
<i>Leptophlebiidae</i>	09020406	0.3	0.3		--	0.2	0.2
<i>Cheumatopsyche</i>	09020604015	0.3	0.3	5	CF	0.2	0.2
<i>Hydropsyche</i>	09020604016	0.3	0.3	4	CF	0.2	0.2
<i>Hydroptila</i>	09020607026	3.0	3.0	6	P	1.8	1.8
<i>Helicopsyche</i>	09020616070	0.0	1.0	3	SC	0.0	0.6
<i>Helicopsyche borealis</i>	09020616070137	1.0	0.0		--	0.6	0.0
<i>Leptoceridae</i>	09020618	0.7	0.7		--	0.4	0.4
<i>Tipulidae</i>	09021001	0.3	0.0		--	0.2	0.0
<i>Tipula</i>	09021001002	0.3	0.4	4	SH	0.2	0.3
<i>Pilaria</i>	09021001013	0.3	0.4	7	PR	0.2	0.3
<i>Pseudolimnophila</i>	09021001014	0.3	0.4	2	--	0.2	0.3
<i>Chironomidae</i>	09021011	1.7	0.0		--	1.0	0.0
<i>Ablabesmyia</i>	09021011001	0.0	0.4	8	PR	0.0	0.2
<i>Ablabesmyia monilis</i>	09021011001009	0.3	0.0		--	0.2	0.0
<i>Conchapelopia</i>	09021011004	0.7	0.7	6	PR	0.4	0.4
<i>Paramerina</i>	09021011013	0.7	0.7		--	0.4	0.4

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Taxa	Code	Count (Average of Baskets)		Biotic Index Value	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Corynoneura</i>	09021011036	0.7	0.7	7	CG	0.4	0.4
<i>Parakiefferiella</i>	09021011052	0.3	0.4		CG	0.2	0.2
<i>Micropsectra</i>	09021011070	1.7	1.7	7	CG	1.0	1.1
<i>Paratanytarsus</i>	09021011071	0.3	0.4	6	--	0.2	0.2
<i>Rheotanytarsus</i>	09021011072	32.0	33.4	6	CF	19.7	20.5
<i>Tanytarsus</i>	09021011076	1.0	1.0	6	CF	0.6	0.6
<i>Paratendipes</i>	09021011100	0.0	0.4	8	CG	0.0	0.2
<i>Paratendipes subaequalis-grp.</i>	09021011100178	0.3	0.0		--	0.2	0.0
<i>Polypedilum</i>	09021011102	0.0	0.4	6	SH	0.0	0.2
<i>Polypedilum flavum</i>	09021011102182	0.3	0.0		--	0.2	0.0
<i>Chrysops</i>	09021014052	0.3	0.3	6	CG	0.2	0.2
<i>Hemerodromia</i>	09021016057	0.7	0.7	3	PR	0.4	0.4
<i>Anacaena</i>	09021105041	0.3	0.3		--	0.2	0.2
<i>Hydrobius</i>	09021105047	0.3	0.3		--	0.2	0.2
<i>Elmidae</i>	09021113	1.3	0.0		--	0.8	0.0
<i>Dubiraphia</i>	09021113064	5.0	5.3	6	CG	3.1	3.3
<i>Macronychus</i>	09021113065	0.0	2.8	4	--	0.0	1.7
<i>Macronychus glabratus</i>	09021113065040	2.7	0.0		--	1.6	0.0
<i>Optioservus</i>	09021113067	2.7	3.9	3	SC	1.6	2.4
<i>Optioservus fastiditus</i>	09021113067044	1.0	0.0		--	0.6	0.0
<i>Stenelmis</i>	09021113070	6.7	9.2	5	SC	4.1	5.7
<i>Stenelmis crenata</i>	09021113070055	2.0	0.0		--	1.2	0.0
<i>Acariformes</i>	090301	0.3	0.3		--	0.2	0.2
<i>Amnicola</i>	10010104013	0.0	0.7		SC	0.0	0.4
<i>Amnicola grana</i>	10010104013019	0.7	0.0		--	0.4	0.0
<i>Stagnicola</i>	10010201025	5.3	5.3		--	3.3	3.3
<i>Physella</i>	10010202027	0.3	0.3		SC	0.2	0.2
<i>Gyraulus</i>	10010203029	0.0	0.7		SC	0.0	0.4
<i>Gyraulus deflectus</i>	10010203029056	0.7	0.0		--	0.4	0.0