

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

Station Information

Station Number: S638	DEP Drainage: Saco
Waterbody: Nason's Brook	HUC Code: 01060001
Town: Portland	HUC Name: Presumpscot
Directions: 10m dwnstrm of Rowe Rd crossing	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order:

Sample Information

Log Number: 1261	Type of Sample: Riffle Bags	Date Deployed: 28-JUL-03
Subsample Factor: X1	Replicates: 3	Date Retrieved: 25-AUG-03

Classification Attainment

Statutory Class: C	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		
	0.50		
	Class NA		
	0.50		
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.00	Class A	0.00
Class C or Non-Attainment	1.00	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Abundance of Individuals	296.00	18 Relative Abundance - Ephemeroptera	0.01
02 Generic Richness	46.00	19 EPT Generic Richness	2.00
03 Plecoptera Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	44.67
04 Ephemeroptera Abundance	1.67	<i>Micropsectra, Parachironomus, Helobdella</i>	
05 Shannon - Wiener Diversity	3.95	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	7.26	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	48.33
07 Relative Abundance - Chironomidae	0.43	<i>Cricotopus, Tanytarsus, Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.46	26 Sum of Abundances: <i>Acroneuria, Stenonema</i>	0.00
09 <i>Hydropsyche</i> Abundance	0.00	28 EP Generic Richness/14	0.07
11 <i>Cheumatopsyche</i> Abundance	0.00	30 Presence of Class A Indicator Taxa/7	0.00
12 EPT Generic Richness/ Diptera Generic Richness	0.10		

Five Most Dominant Taxa

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.11	1	Paratendipes	17.23
15 Perlidae Abundance (Family Functional Group)	0.00	2	Tanytarsus	15.43
16 Tanypodinae Abundance (Family Functional Group)	17.33	3	Helobdella	14.19
17 Chironomini Abundance (Family Functional Group)	58.67	4	Haliplus	8.90
		5	Tubificidae	8.78

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Log Number:	1261	Town:	Portland	Date Retrieved:	25-AUG-03

Sample Collection and Processing Information

Sampling Organization:
Taxonomist: Michael Winnell

Waterbody Information

Water Temperature:	21.1 °C	Specific Conductance	795.0 uS/cm	Channel Width:	4.5 m
Velocity:		Dissolved Oxygen:	6.7 ppm	Channel Depth:	35.0 cm

Summary of Habitat Characteristics

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

Substrate

Boulder	Rubble	Gravel	Sand	Silt
10%	20%	30%	30%	10%

Comments about the Station or Sample

8/25/03 Data:
Flow: visible; Depth: 35cm; Temp: 18.7C; SPC: 712uS/cm; DO: 7.33mg/L; pH: 7.59

Comments about the Final Determination

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Log Number: 1261 **Subsample:** X1 **Replicates:** 3 **Calculated:**

BioME Aquatic Life Taxonomic Inventory Report

Taxa	Code	Count (Average of Baskets)		Biotic Index Value	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Phagocata</i>	03010101004	2.33	2.33		--	0.8	0.8
<i>Prostoma</i>	04010101001	5.00	5.00		--	1.7	1.7
<i>Dero</i>	08020202007	0.67	1.67		CG	0.2	0.6
<i>Dero nivea</i>	08020202007003	1.00	0.00		--	0.3	0.0
<i>Tubificidae</i>	08020203	26.00	26.00		--	8.8	8.8
<i>Limnodrilus</i>	08020203005	0.00	3.67		CG	0.0	1.2
<i>Limnodrilus hoffmeisteri</i>	08020203005003	3.67	0.00		--	1.2	0.0
<i>Hirudinea</i>	0803	0.33	0.33		--	0.1	0.1
<i>Glossiphonia</i>	08030101004	0.00	21.67		--	0.0	7.3
<i>Glossiphonia complanata</i>	08030101004001	21.67	0.00		--	7.3	0.0
<i>Helobdella</i>	08030101005	0.00	42.00		--	0.0	14.2
<i>Helobdella stagnalis</i>	08030101005004	42.00	0.00		--	14.2	0.0
<i>Erpobdellidae</i>	08030301	0.67	0.67		--	0.2	0.2
<i>Erpobdella</i>	08030301002	0.00	0.67		--	0.0	0.2
<i>Erpobdella punctata</i>	08030301002001	0.67	0.00		--	0.2	0.0
<i>Caecidotea</i>	09010101001	0.00	0.33	8	SH	0.0	0.1
<i>Caecidotea communis</i>	09010101001001	0.33	0.00		--	0.1	0.0
<i>Aeshna</i>	09020301001	0.00	1.00	5	PR	0.0	0.3
<i>Aeshna umbrosa</i>	09020301001006	1.00	0.00		--	0.3	0.0
<i>Coenagrionidae</i>	09020309	4.67	4.67		--	1.6	1.6
<i>Caenis</i>	09020412040	1.67	1.67	7	CG	0.6	0.6
<i>Ptilostomis</i>	09020608041	1.33	1.33	5	SH	0.4	0.4
<i>Tipula</i>	09021001002	1.00	1.00	4	SH	0.3	0.3
<i>Ceratopogonidae</i>	09021010	0.33	0.00		--	0.1	0.0
<i>Culicoides</i>	09021010037	0.67	0.75	10	PR	0.2	0.3
<i>Bezzia/Palpomyia</i>	09021010043	0.33	0.38	6	PR	0.1	0.1
<i>Ceratopogon</i>	09021010046	1.67	1.88		--	0.6	0.6
<i>Clinotanytus</i>	09021011002	1.67	1.67	8	PR	0.6	0.6
<i>Meropelopia</i>	09021011010	0.67	0.67		--	0.2	0.2
<i>Paramerina</i>	09021011013	0.67	0.67		--	0.2	0.2
<i>Procladius</i>	09021011015	14.33	14.33	9	PR	4.8	4.8
<i>Cricotopus</i>	09021011037	0.00	2.67	7	SH	0.0	0.9
<i>Cricotopus bicinctus</i>	09021011037057	0.67	0.00		--	0.2	0.0
<i>Cricotopus vierriensis</i>	09021011037071	2.00	0.00		--	0.7	0.0
<i>Orthocladius</i>	09021011050	0.00	1.33	6	CG	0.0	0.4
<i>Orthocladius annectens</i>	09021011050092	1.33	0.00		--	0.4	0.0
<i>Parakiefferiella</i>	09021011052	0.33	0.33		CG	0.1	0.1
<i>Paratanytarsus</i>	09021011071	0.33	0.33	6	--	0.1	0.1

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		Actual	Adjusted			Actual	Adjusted
<i>Tanytarsus</i>	09021011076	45.67	45.67	6	CF	15.4	15.4
<i>Chironomus</i>	09021011080	2.00	2.00	10	CG	0.7	0.7
<i>Cladopelma</i>	09021011081	1.33	1.33	9	CG	0.4	0.4
<i>Dicrotendipes</i>	09021011085	1.00	2.33	8	CG	0.3	0.8
<i>Dicrotendipes neomodestus</i>	09021011085152	1.33	0.00		--	0.4	0.0
<i>Parachironomus</i>	09021011097	0.33	0.33	10	PR	0.1	0.1
<i>Paratendipes</i>	09021011100	0.00	51.00	8	CG	0.0	17.2
<i>Paratendipes albimanus-grp.</i>	09021011100176	51.00	0.00		--	17.2	0.0
<i>Phaenopsectra</i>	09021011101	0.00	1.67	7	SC	0.0	0.6
<i>Phaenopsectra punctipes-grp.</i>	09021011101181	1.67	0.00		--	0.6	0.0
<i>Stratiomys</i>	09021013049	0.33	0.33		CG	0.1	0.1
<i>Chrysops</i>	09021014052	0.33	0.33	6	CG	0.1	0.1
<i>Haliplus</i>	09021101001	23.33	26.33		P	7.9	8.9
<i>Haliplus immaculicollis</i>	09021101001002	3.00	0.00		P	1.0	0.0
<i>Peltodytes</i>	09021101002	0.00	0.67		P	0.0	0.2
<i>Peltodytes edentulus</i>	09021101002004	0.67	0.00		--	0.2	0.0
<i>Neoporos</i>	09021103033	1.67	1.67		--	0.6	0.6
<i>Nebrioporus</i>	09021103034	0.00	2.00		--	0.0	0.7
<i>Nebrioporus rotundatus</i>	09021103034001	2.00	0.00		--	0.7	0.0
<i>Dubiraphia</i>	09021113064	3.67	3.67	6	CG	1.2	1.2
<i>Stenelmis</i>	09021113070	0.00	0.33	5	SC	0.0	0.1
<i>Stenelmis crenata</i>	09021113070055	0.33	0.00		--	0.1	0.0
<i>Acariformes</i>	090301	1.00	1.00		--	0.3	0.3
<i>Basommatophora</i>	100102	1.67	1.67		--	0.6	0.6
<i>Physa</i>	10010202026	0.33	0.33		SC	0.1	0.1
<i>Helisoma</i>	10010203030	0.00	0.67		SC	0.0	0.2
<i>Helisoma anceps</i>	10010203030058	0.67	0.00		--	0.2	0.0
<i>Sphaeriidae</i>	10020201	2.33	2.33		SC	0.8	0.8
<i>Pisidium</i>	10020201002	2.00	11.33		CF	0.7	3.8
<i>Pisidium casertanum</i>	10020201002006	9.33	0.00		--	3.2	0.0