

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

Station Information

Station Number: S675	DEP Drainage: Saco
Waterbody: Trout Brook	HUC Code: 01060001
Town: South Portland	HUC Name: Presumpscot
Directions: approx 125m upstream of Boothby Ave	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order: 2

Sample Information

Log Number: 1276	Type of Sample: Riffle Bags	Date Deployed: 12-AUG-03
Subsample Factor: X4	Replicates: 3	Date Retrieved: 09-SEP-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		
	Class NA		
	1.00		
<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	477.33	18 Relative Abundance - Ephemeroptera	0.00
02 Generic Richness	38.00	19 EPT Generic Richness	1.00
03 Plecoptera Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes,</i>	121.98
04 Ephemeroptera Abundance	0.00	<i>Micropsectra, Parachironomus, Helobdella</i>	
05 Shannon - Wiener Diversity	3.42	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	6.40	25 Sum of Abundances: <i>Cheumatopsyche,</i>	174.00
07 Relative Abundance - Chironomidae	0.73	<i>Cricotopus, Tanytarsus, Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.53	26 Sum of Abundances: <i>Acroneuria, Stenonema</i>	0.00
09 <i>Hydropsyche</i> Abundance	0.00	28 EP Generic Richness/14	0.00
11 <i>Cheumatopsyche</i> Abundance	0.00	30 Presence of Class A Indicator Taxa/7	0.00
12 EPT Generic Richness/ Diptera Generic Richness	0.05		

Five Most Dominant Taxa

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.01	1	Tanytarsus	32.56
15 Perlidae Abundance (Family Functional Group)	0.00	2	Micropsectra	20.17
16 Tanypodinae Abundance (Family Functional Group)	6.76	3	Rheotanytarsus	7.43
17 Chironomini Abundance (Family Functional Group)	13.51	4	Caecidotea	7.26
		5	Dubiraphia	6.43

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Sample Collection and Processing Information

Sampling Organization:
Taxonomist: Michael Winnell

Waterbody Information

Water Temperature:	17.1 °C	Specific Conductance	685.0 uS/cm	Channel Width:	7.0 m
Velocity:	12 cm/s	Dissolved Oxygen:	5.5 ppm	Channel Depth:	20.0 cm

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Stressor</u>	<u>Location</u>
Upland Hardwood Urban	Partly Open		Above Urban NPS

Substrate

Boulder	Rubble	Gravel	Sand
5%	40%	20%	35%

Comments about the Station or Sample

9/9/03 Data:
Flow: 9.6cm/s; Depth: 20cm; Temp: 14.5C; SPC: 718uS/cm; DO: 4.4mg/L; pH: 7.30

Comments about the Final Determination

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Log Number: 1276 **Subsample:** X4 **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>Hydra</i>	02010101001	6.67	6.67		PR	1.4	1.4
<i>Phagocata</i>	03010101004	1.33	1.33		--	0.3	0.3
<i>Prostoma</i>	04010101001	1.33	1.33		--	0.3	0.3
<i>Dero</i>	08020202007	1.33	1.33		CG	0.3	0.3
<i>Nais</i>	08020202009	0.00	1.33		CG	0.0	0.3
<i>Nais communis</i>	08020202009005	1.33	0.00		--	0.3	0.0
<i>Pristinella</i>	08020202016	0.00	2.67		--	0.0	0.6
<i>Pristinella osborni</i>	08020202016001	2.67	0.00		--	0.6	0.0
<i>Tubificidae</i>	08020203	1.33	1.33		--	0.3	0.3
<i>Helobdella</i>	08030101005	0.00	24.00		--	0.0	5.0
<i>Helobdella stagnalis</i>	08030101005004	24.00	0.00		--	5.0	0.0
<i>Caecidotea</i>	09010101001	21.33	34.67	8	SH	4.5	7.3
<i>Caecidotea communis</i>	09010101001001	13.33	0.00		--	2.8	0.0
<i>Ptilostomis</i>	09020608041	5.33	5.33	5	SH	1.1	1.1
<i>Tipula</i>	09021001002	1.33	1.33	4	SH	0.3	0.3
<i>Chironomidae</i>	09021011	73.33	0.00		--	15.4	0.0
<i>Conchapelopia</i>	09021011004	1.33	1.69	6	PR	0.3	0.4
<i>Meropelopia</i>	09021011010	2.67	3.38		--	0.6	0.7
<i>Zavreliomyia</i>	09021011022	0.00	1.69	8	PR	0.0	0.4
<i>Zavreliomyia thryptica-grp.</i>	09021011022045	1.33	0.00		PR	0.3	0.0
<i>Corynoneura</i>	09021011036	1.33	1.69	7	CG	0.3	0.4
<i>Cricotopus</i>	09021011037	0.00	18.58	7	SH	0.0	3.9
<i>Cricotopus bicinctus</i>	09021011037057	14.67	0.00		--	3.1	0.0
<i>Heterotrissocladius</i>	09021011044	1.33	1.69	0	CG	0.3	0.4
<i>Limnophyes</i>	09021011047	1.33	1.69	8	CG	0.3	0.4
<i>Parametriocnemus</i>	09021011053	10.67	13.51	5	CG	2.2	2.8
<i>Synorthocladius</i>	09021011061	1.33	1.69	2	CG	0.3	0.4
<i>Tvetenia</i>	09021011065	0.00	1.69	5	CG	0.0	0.4
<i>Tvetenia bavarica grp.</i>	09021011065111	1.33	0.00		--	0.3	0.0
<i>Micropsectra</i>	09021011070	76.00	96.29	7	CG	15.9	20.2
<i>Rheotanytarsus</i>	09021011072	28.00	35.48	6	CF	5.9	7.4
<i>Tanytarsus</i>	09021011076	122.67	155.42	6	CF	25.7	32.6
<i>Dicrotendipes</i>	09021011085	1.33	1.69	8	CG	0.3	0.4
<i>Paratendipes</i>	09021011100	0.00	8.45	8	CG	0.0	1.8
<i>Paratendipes subaequalis-grp.</i>	09021011100178	6.67	0.00		--	1.4	0.0
<i>Phaenopsectra</i>	09021011101	0.00	1.69	7	SC	0.0	0.4
<i>Phaenopsectra punctipes-grp.</i>	09021011101181	1.33	0.00		--	0.3	0.0
<i>Polypedilum</i>	09021011102	0.00	1.69	6	SH	0.0	0.4

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<i>Polypedilum illinoense-grp.</i>	09021011102185	1.33	0.00		--	0.3	0.0
<i>Clinocera</i>	09021016056	1.33	1.33	3	--	0.3	0.3
<i>Chelifera</i>	09021016060	2.67	2.67		--	0.6	0.6
<i>Haliphus</i>	09021101001	2.67	2.67		P	0.6	0.6
<i>Peltodytes</i>	09021101002	1.33	1.33		P	0.3	0.3
<i>Agabus</i>	09021103016	1.33	1.33		PR	0.3	0.3
<i>Dubiraphia</i>	09021113064	30.67	30.67	6	CG	6.4	6.4
<i>Stenelmis</i>	09021113070	2.67	2.67	5	SC	0.6	0.6
<i>Acariformes</i>	090301	1.33	1.33		--	0.3	0.3
<i>Basommatophora</i>	100102	1.33	1.33		--	0.3	0.3
<i>Fossaria</i>	10010201021	1.33	1.33		--	0.3	0.3
<i>Physa</i>	10010202026	1.33	1.33		SC	0.3	0.3