

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

Station Information

Station Number: S302	DEP Drainage: Saco
Waterbody: Trout Brook	HUC Code: 01060001
Town: SOUTH PORTLAND	HUC Name: Presumpscot
Directions: 25m above Highland Ave. crossing	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order: 2

Sample Information

Log Number: 1396	Type of Sample: Riffle Bags	Date Deployed: 26-JUL-04
Subsample Factor: X4	Replicates: 3	Date Retrieved: 23-AUG-04

Classification Attainment

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

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.00	Class C	0.18	Class A, B, or C	0.00
Class B	0.01	Class NA	0.81	Non-Attainment	1.00
<u>B or Better Model</u>			<u>A Model</u>		
Class A or B		0.00	Class A		0.02
Class C or Non-Attainment		1.00	Class B or C or Non-Attainment		0.98

Model Variables

01 Total Abundance of Individuals	704.00	18 Relative Abundance - Ephemeroptera	0.00
02 Generic Richness	34.00	19 EPT Generic Richness	7.00
03 Plecoptera Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	10.72
04 Ephemeroptera Abundance	1.33	<i>Micropsectra, Parachironomus, Helobdella</i>	
05 Shannon - Wiener Diversity	2.03	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	4.10	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	1.36
07 Relative Abundance - Chironomidae	0.11	<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	2.13	28 EP Generic Richness/14	0.07
11 <i>Cheumatopsyche</i> Abundance	0.00	30 Presence of Class A Indicator Taxa/7	0.14
12 EPT Generic Richness/ Diptera Generic Richness	0.39		

Five Most Dominant Taxa

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.05	1	Gammarus	73.30
15 Perlidae Abundance (Family Functional Group)	0.00	2	Stylodrilus	2.78
16 Tanypodinae Abundance (Family Functional Group)	2.72	3	Diplectrona	2.73
17 Chironomini Abundance (Family Functional Group)	23.08	4	Prodiamesa	2.51
		5	Limnephilus	1.89

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

Station Number S302 Town: SOUTH PORTLAND Date Deployed: 26-JUL-04
Log Number: 1396 Waterbody: Trout Brook Date Retrieved: 23-AUG-04

Sample Collection and Processing Information

Sampling Organization:
Taxonomist: Michael Winnell

Waterbody Information

Water Temperature: 14.9 °C	Specific Conductance 687.0 uS/cm	Channel Width: 2.3 m
Velocity: 30 cm/s	Dissolved Oxygen: 9.1 ppm	Channel Depth: 21.0 cm

Summary of Habitat Characteristics

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

Substrate

Boulder	Rubble	Sand	Detritus
15%	20%	60%	5%

Comments about the Station or Sample

8/23/04 Data:
Flow: 40.7cm/s; Depth: 24cm; Temp: 14.8C; SPC: 389uS/cm; DO: 8.9mg/L; pH:

Comments about the Final Determination

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

Station Number: S302 **Waterbody:** Trout Brook

Town: SOUTH PORTLAND

Log Number: 1396 **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>Enchytraeidae</i>	08020201	4.00	4.00		--	0.6	0.6
<i>Tubificidae</i>	08020203	5.33	0.00		--	0.8	0.0
<i>Limnodrilus</i>	08020203005	0.00	1.78		CG	0.0	0.3
<i>Limnodrilus hoffmeisteri</i>	08020203005003	1.33	0.00		--	0.2	0.0
<i>Stylodrilus</i>	08020203011	0.00	19.56		--	0.0	2.8
<i>Stylodrilus heringianus</i>	08020203011001	14.67	0.00		--	2.1	0.0
<i>Lumbricidae</i>	08020205	6.67	6.67		--	0.9	0.9
<i>Helobdella</i>	08030101005	0.00	8.00		--	0.0	1.1
<i>Helobdella stagnalis</i>	08030101005004	8.00	0.00		--	1.1	0.0
<i>Erpobdella</i>	08030301002	0.00	2.67		--	0.0	0.4
<i>Erpobdella punctata</i>	08030301002001	2.67	0.00		--	0.4	0.0
<i>Caecidotea</i>	09010101001	9.33	12.00	8	SH	1.3	1.7
<i>Caecidotea communis</i>	09010101001001	2.67	0.00		--	0.4	0.0
<i>Gammarus</i>	09010201003	0.00	516.00	4	--	0.0	73.3
<i>Gammarus fasciatus</i>	09010201003003	516.00	0.00		--	73.3	0.0
<i>Epeorus</i>	09020402009	1.33	1.33	0	CG	0.2	0.2
<i>Hydropsychidae</i>	09020604	8.00	0.00		--	1.1	0.0
<i>Diplectrona</i>	09020604014	0.00	19.20	0	CF	0.0	2.7
<i>Diplectrona modesta</i>	09020604014025	12.00	0.00		--	1.7	0.0
<i>Hydropsyche</i>	09020604016	1.33	2.13	4	CF	0.2	0.3
<i>Rhyacophila</i>	09020605019	1.33	1.33	2	PR	0.2	0.2
<i>Glossosoma</i>	09020606020	2.67	2.67	0	SC	0.4	0.4
<i>Limnephilus</i>	09020610055	13.33	13.33	3	SH	1.9	1.9
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.2	0.2
<i>Tipula</i>	09021001002	5.33	5.33	4	SH	0.8	0.8
<i>Dicranota</i>	09021001005	2.67	2.67	3	PR	0.4	0.4
<i>Pilaria</i>	09021001013	1.33	1.33	7	PR	0.2	0.2
<i>Chironomidae</i>	09021011	1.33	0.00		--	0.2	0.0
<i>Meropelopia</i>	09021011010	2.67	2.72		--	0.4	0.4
<i>Prodiamesa</i>	09021011031	0.00	17.65	3	CG	0.0	2.5
<i>Prodiamesa olivacea</i>	09021011031048	17.33	0.00		--	2.5	0.0
<i>Brillia</i>	09021011033	0.00	1.36	5	SH	0.0	0.2
<i>Brillia parva</i>	09021011033050	1.33	0.00		--	0.2	0.0
<i>Chaetocladius</i>	09021011035	1.33	1.36	6	CG	0.2	0.2
<i>Orthocladius</i>	09021011050	0.00	1.36	6	CG	0.0	0.2
<i>Orthocladius carlatus</i>	09021011050093	1.33	0.00		--	0.2	0.0
<i>Parametriocnemus</i>	09021011053	8.00	8.15	5	CG	1.1	1.2

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

Station Number: S302 **Waterbody:** Trout Brook

Town: SOUTH PORTLAND

Log Number: 1396 **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>Synorthocladius</i>	09021011061			1.33	1.36
<i>Tvetenia</i>	09021011065	0.00	10.86	5	CG	0.0	1.5
<i>Tvetenia bavarica grp.</i>	09021011065111	10.67	0.00		--	1.5	0.0
<i>Micropsectra</i>	09021011070	2.67	2.72	7	CG	0.4	0.4
<i>Rheotanytarsus</i>	09021011072	1.33	1.36	6	CF	0.2	0.2
<i>Tanytarsus</i>	09021011076	1.33	1.36	6	CF	0.2	0.2
<i>Paratendipes</i>	09021011100	1.33	9.50	8	CG	0.2	1.3
<i>Paratendipes albimanus-grp.</i>	09021011100176	1.33	0.00		--	0.2	0.0
<i>Paratendipes subaequalis-grp.</i>	09021011100178	6.67	0.00		--	0.9	0.0
<i>Polypedilum</i>	09021011102	0.00	4.07	6	SH	0.0	0.6
<i>Polypedilum scalaenum-grp.</i>	09021011102189	4.00	0.00		--	0.6	0.0
<i>Stictochironomus</i>	09021011106	0.00	9.50	9	CG	0.0	1.3
<i>Stictochironomus annulicrus</i>	09021011106198	9.33	0.00		CG	1.3	0.0
<i>Odontomesa</i>	09021011121	0.00	1.36	4	--	0.0	0.2
<i>Odontomesa fulva</i>	09021011121001	1.33	0.00		--	0.2	0.0
<i>Dubiraphia</i>	09021113064	8.00	8.00	6	CG	1.1	1.1