

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

**Station Information**

<b>Station Number:</b> S387	DEP Drainage: Saco
Waterbody: Barberry Creek	HUC Code: 01060001
Town: South Portland	HUC Name: Presumpscot
Directions: 100 ft upstrm of culvert in corner of Evans St. and Broadway	Latitude: Deg Min Sec
	Longitude: Deg Min Sec
	Stream Order: 2

**Sample Information**

<b>Log Number:</b> 1258	Type of Sample: Riffle Bags	Date Deployed: 28-JUL-03
Subsample Factor: X4	Replicates: 3	Date Retrieved: 25-AUG-03

**Classification Attainment**

Statutory Class: C	<b>Final Determination:</b> 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	625.33	18 Relative Abundance - Ephemeroptera	0.00
02 Generic Richness	34.00	19 EPT Generic Richness	1.00
03 Plecoptera Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	84.80
04 Ephemeroptera Abundance	0.00	<i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	
05 Shannon - Wiener Diversity	3.37	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	6.79	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	5.39
07 Relative Abundance - Chironomidae	0.31	<i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	
08 Relative Generic Richness - Diptera	0.53	26 Sum of Abundances: <i>Acroneuria</i> , <i>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	0.06		

**Five Most Dominant Taxa**

		Taxa Rank	Taxa Name	Percent
13 Relative Abundance - Oligochaeta	0.40	1	Stylodrilus	34.48
15 Perlidae Abundance (Family Functional Group)	0.00	2	Caecidotea	15.78
16 Tanypodinae Abundance (Family Functional Group)	19.78	3	Micropsectra	11.21
17 Chironomini Abundance (Family Functional Group)	89.91	4	Polypedilum	11.21
		5	Eclipidrilus	4.05

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Station Number	S387	Waterbody:	Barberry Creek	Date Deployed:	28-JUL-03
Log Number:	1258	Town:	South Portland	Date Retrieved:	25-AUG-03

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**Sample Collection and Processing Information**

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Sampling Organization:  
Taxonomist: Michael Winnell

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**Waterbody Information**

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Water Temperature:	19.3 °C	Specific Conductance	563.0 uS/cm	Channel Width:	3.8 m
Velocity:	21 cm/s	Dissolved Oxygen:	6.2 ppm	Channel Depth:	11.0 cm

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**Summary of Habitat Characteristics**

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

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**Substrate**

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Rubble	Gravel	Sand	Silt
5%	35%	55%	5%

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**Comments about the Station or Sample**

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8/25/03 Data:  
Flow: 5.7cm/s; Depth: 15cm; Temp: 16.3C; SPC: 639uS/cm; DO: 7.05mg/L; pH: 7.12

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**Comments about the Final Determination**

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**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>Eclipidrilus</i>	08020101003	25.33	25.33		--	4.1	4.1
<i>Enchytraeidae</i>	08020201	1.33	1.33		--	0.2	0.2
<i>Tubificidae</i>	08020203	54.67	0.00		--	8.7	0.0
<i>Aulodrilus</i>	08020203001	0.00	1.77		--	0.0	0.3
<i>Aulodrilus pluriseta</i>	08020203001004	1.33	0.00		--	0.2	0.0
<i>Limnodrilus</i>	08020203005	0.00	5.30		CG	0.0	0.8
<i>Limnodrilus hoffmeisteri</i>	08020203005003	4.00	0.00		--	0.6	0.0
<i>Stylodrilus</i>	08020203011	0.00	215.60		--	0.0	34.5
<i>Stylodrilus heringianus</i>	08020203011001	162.67	0.00		--	26.0	0.0
<i>Glossiphonia</i>	08030101004	0.00	4.00		--	0.0	0.6
<i>Glossiphonia complanata</i>	08030101004001	4.00	0.00		--	0.6	0.0
<i>Helobdella</i>	08030101005	0.00	14.67		--	0.0	2.3
<i>Helobdella stagnalis</i>	08030101005004	14.67	0.00		--	2.3	0.0
<i>Erpobdella</i>	08030301002	0.00	8.00		--	0.0	1.3
<i>Erpobdella punctata</i>	08030301002001	8.00	0.00		--	1.3	0.0
<i>Caecidotea</i>	09010101001	69.33	98.67	8	SH	11.1	15.8
<i>Caecidotea communis</i>	09010101001001	29.33	0.00		--	4.7	0.0
<i>Gammarus</i>	09010201003	2.67	2.67	4	--	0.4	0.4
<i>Cordulegaster</i>	09020303019	0.00	2.67	3	PR	0.0	0.4
<i>Cordulegaster maculata</i>	09020303019042	2.67	0.00		--	0.4	0.0
<i>Limnephilus</i>	09020610055	13.33	13.33	3	SH	2.1	2.1
<i>Lepidoptera</i>	090209	1.33	1.33		--	0.2	0.2
<i>Dicranota</i>	09021001005	1.33	1.33	3	PR	0.2	0.2
<i>Erioptera</i>	09021001006	1.33	1.33	7	CG	0.2	0.2
<i>Ceratopogonidae</i>	09021010	5.33	5.33		--	0.9	0.9
<i>Chironomidae</i>	09021011	50.67	0.00		--	8.1	0.0
<i>Meropelopia</i>	09021011010	4.00	5.39		--	0.6	0.9
<i>Natarsia</i>	09021011011	6.67	8.99	8	PR	1.1	1.4
<i>Zavrelimyia</i>	09021011022	4.00	5.39	8	PR	0.6	0.9
<i>Prodiamesa</i>	09021011031	0.00	3.60	3	CG	0.0	0.6
<i>Prodiamesa olivacea</i>	09021011031048	2.67	0.00		--	0.4	0.0
<i>Brillia</i>	09021011033	1.33	1.80	5	SH	0.2	0.3
<i>Micropsectra</i>	09021011070	52.00	70.13	7	CG	8.3	11.2
<i>Rheotanytarsus</i>	09021011072	1.33	1.80	6	CF	0.2	0.3
<i>Tanytarsus</i>	09021011076	4.00	5.39	6	CF	0.6	0.9
<i>Cryptochironomus</i>	09021011082	1.33	1.80	8	PR	0.2	0.3
<i>Paracladopelma</i>	09021011098	0.00	12.59	7	--	0.0	2.0
<i>Paracladopelma undine</i>	09021011098177	9.33	0.00		--	1.5	0.0

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<i>Phaenopsectra</i>	09021011101	0.00	5.39	7	SC	0.0	0.9
<i>Phaenopsectra punctipes-grp.</i>	09021011101181	4.00	0.00		--	0.6	0.0
<i>Polypedilum</i>	09021011102	8.00	70.13	6	SH	1.3	11.2
<i>Polypedilum illinoense-grp.</i>	09021011102185	2.67	0.00		--	0.4	0.0
<i>Polypedilum scalaenum-grp.</i>	09021011102189	41.33	0.00		--	6.6	0.0
<i>Apsectrotanypus</i>	09021011109	0.00	1.80		--	0.0	0.3
<i>Apsectrotanypus johnsoni</i>	09021011109001	1.33	0.00		--	0.2	0.0
<i>Odontomesa</i>	09021011121	1.33	1.80	4	--	0.2	0.3
<i>Chrysops</i>	09021014052	2.67	2.67	6	CG	0.4	0.4
<i>Neoporus</i>	09021103033	1.33	1.33		--	0.2	0.2
<i>Sphaeriidae</i>	10020201	12.00	12.00		SC	1.9	1.9
<i>Pisidium</i>	10020201002	4.00	10.67		CF	0.6	1.7
<i>Pisidium walkeri</i>	10020201002017	6.67	0.00		--	1.1	0.0