



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

Station Information

Station Number: S-753	DEP Drainage: Piscataqua - Presumpscot - Saco
Waterbody: South Branch Long Creek - Station 753	HUC8: 01060001
Town: South Portland	HUC8 Name: Presumpscot
Directions: GORHAM RD, SHOPS AT CLARKS POND, BACK OF HOME DEPOT	Latitude: 43 38 1.16 N
	Longitude: 70 19 17.04 W
	Stream Order: 1

Sample Information

Log Number: 1925	Type of Sample: ROCK BAG	Date Deployed: 7/12/2010
Subsample Factor: X1	Replicates: 2	Date Retrieved: 8/13/2010

Classification Attainment

Statutory Class: C	Final Determination: NA	Date: 4/11/2011
Model Result with P>.6: NA	Reason for Determination: Model	
Date Last Calculated: 4/11/2011	Comments:	

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
<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 Mean Abundance	314.00	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	33.00	19 EPT Generic Richness	3.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	1.02
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.00	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	62.94
06 Hilsenhoff Biotic Index	6.94	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.93	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.48	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	0.19		
13 Relative Abundance - Oligochaeta	0.02		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	26.31		
17 Chironomini Abundance (Family Functional Group)	219.76		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Paratendipes</i>	29.57
2	<i>Polypedilum</i>	27.44
3	<i>Tanytarsus</i>	13.96
4	<i>Phaenopsectra</i>	8.54
5	<i>Ablabesmyia</i>	6.08



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT
 Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 23.1 deg C
 Dissolved Oxygen: 6.7 mg/l
 Specific Conductance: 1082 uS/cm
 Velocity:
 pH:
 Wetted Width: 1.9 m
 Bankfull Width: 4 m
 Depth: 28 cm

Waterbody Information - Retrieval

Temperature: 19.7 deg C
 Dissolved Oxygen: 6.6 mg/l
 Specific Conductance: 1172 uS/cm
 Velocity:
 pH: 7.4
 Wetted Width: 1.9 m
 Bankfull Width: 4 m
 Depth: 23 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Swamp Hardwood	Partly Open	Rolling	
Upland Conifer			
Upland Hardwood			
Urban			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Nps Pollution	Below Urban NPS	Detritus	5 %
Urban Runoff		Rubble/Cobble	35 %
		Sand	60 %

Landcover Summary - 2004 Data

Sample Comments

8/13/2010 FLOW VISIBLE BUT VELOCITY NOT MEASURABLE.
 7/12/2010 LOTS OF POTAMOGETAN. FLOW VISIBLE BUT VELOCITY NOT MEASURABLE.



**Maine Department of Environmental Protection
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Aquatic Life Taxonomic Inventory Report**

Station Number: S-753 Waterbody: South Branch Long Creek - Station 753 Town: South Portland
Log Number: 1925 Subsample Factor: X1 Replicates: 2 Calculated: 4/11/2011

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Eclipidrilus</i>	08020101003	2.00	2.00		--	0.6	0.6
Enchytraeidae	08020201	1.00	1.00		--	0.3	0.3
Naididae	08020202	2.50	2.50		--	0.8	0.8
<i>Limnodrilus</i>	08020202022		1.00		CG		0.3
<i>Limnodrilus hoffmeisteri</i>	08020202022003	1.00			--	0.3	
<i>Glossiphonia</i>	08030101004		0.50		--		0.2
<i>Glossiphonia complanata</i>	08030101004001	0.50			--	0.2	
<i>Helobdella</i>	08030101005		0.50		--		0.2
<i>Helobdella stagnalis</i>	08030101005004	0.50			--	0.2	
<i>Erpobdella</i>	08030203002		2.50		--		0.8
<i>Erpobdella fervida</i>	08030203002002	2.50			--	0.8	
<i>Boyeria</i>	09020301004		1.00	2	PR		0.3
<i>Boyeria vinosa</i>	09020301004012	1.00			--	0.3	
Calopterygidae	09020307	1.00	1.00		--	0.3	0.3
<i>Calopteryx</i>	09020307043		0.50	5	PR		0.2
<i>Calopteryx maculata</i>	09020307043088	0.50			--	0.2	
<i>Phylocentropus</i>	09020603011	0.50	0.50	5	CF	0.2	0.2
Hydropsychidae	09020604	0.50	0.50		--	0.2	0.2
Limnephilidae	09020610	0.50	0.50		--	0.2	0.2
<i>Nigronia</i>	09020701003		1.00	0	PR		0.3
<i>Nigronia serricornis</i>	09020701003003	1.00			--	0.3	
<i>Sialis</i>	09020702004	0.50	0.50	4	PR	0.2	0.2
<i>Antocha</i>	09021001004	0.50	0.50	3	CG	0.2	0.2
<i>Dasyhelea</i>	09021010036	0.50	0.50		CG	0.2	0.2
<i>Bezzia/palpomyia</i>	09021010043	0.50	0.50	6	PR	0.2	0.2
Chironomidae	09021011	9.00			--	2.9	
<i>Ablabesmyia</i>	09021011001		19.09	8	PR		6.1
<i>Ablabesmyia mallochii</i>	09021011001004	18.50			--	5.9	
<i>Natarsia</i>	09021011011		2.06	8	PR		0.7
<i>Natarsia baltimorea</i>	09021011011026	2.00			--	0.6	
<i>Procladius</i>	09021011015	5.00	5.16	9	PR	1.6	1.6
<i>Parakiefferiella</i>	09021011052				CG		
<i>Micropsectra</i>	09021011070			7	CG		
<i>Paratanytarsus</i>	09021011071	2.50	2.58	6	--	0.8	0.8
<i>Stempellinella leptocelloides</i>	09021011074001				--		
<i>Tanytarsus</i>	09021011076	42.50	43.85	6	CF	13.5	14.0
<i>Chironomus</i>	09021011080	3.00	3.10	10	CG	1.0	1.0
<i>Cryptochironomus</i>	09021011082	5.00	5.16	8	PR	1.6	1.6



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<i>Dicrotendipes</i>	09021011085	0.50	0.52	8	CG	0.2	0.2
<i>Microtendipes</i>	09021011094		5.16	6	CF		1.6
<i>Microtendipes rydalensis</i> group	09021011094168	5.00			--	1.6	
<i>Paratendipes</i>	09021011100		92.86	8	CG		29.6
<i>Paratendipes albimanus</i> group	09021011100176	87.50			--	27.9	
<i>Paratendipes subaequalis</i> group	09021011100178	2.50			--	0.8	
<i>Phaenopsectra</i>	09021011101		26.83	7	SC		8.5
<i>Phaenopsectra flavipes</i>	09021011101179	6.00			SC	1.9	
<i>Phaenopsectra obediens</i>	09021011101182	20.00			SC	6.4	
<i>Polypedilum</i>	09021011102	0.50	86.15	6	SH	0.2	27.4
<i>Polypedilum scalaenum</i> group	09021011102189	81.00			--	25.8	
<i>Polypedilum halterale</i> group	09021011102193	2.00			--	0.6	
<i>Neoplasta</i>	09021016064	1.00	1.00		PR	0.3	0.3
<i>Dubiraphia</i>	09021113064	2.50	2.50	6	--	0.8	0.8
<i>Physa</i>	10010202026	1.00	1.00		SC	0.3	0.3