



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

Station Information

Station Number: S-408	River Basin: Saco
Waterbody: South Branch Long Creek - Station 408	HUC8 Name: Presumpscot
Town: South Portland	Latitude: 43 37 57.99 N
Directions: HOYT'S THEATER - 75 M UPSTREAM OF TRAIL CROSSING	Longitude: 70 19 38.84 W
	Stream Order: 1

Sample Information

Log Number: 2400	Type of Sample: ROCK BAG	Date Deployed: 7/30/2015
Subsample Factor: X1	Replicates: 2	Date Retrieved: 8/27/2015

Classification Attainment

Statutory Class: C	Final Determination: NA	Date: 6/16/2016
Model Result with $P \geq 0.6$: NA	Reason for Determination: Model	
Date Last Calculated: 6/16/2016	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	138.00	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	24.00	19 EPT Generic Richness	3.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	0.50
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.36	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	4.50
06 Hilsenhoff Biotic Index	6.10	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.85	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.50	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	0.25		

Five Most Dominant Taxa

13 Relative Abundance - Oligochaeta	0.09	Rank	Taxon Name	Percent
15 Perlidae Mean Abundance (Family Functional Group)	0.00	1	<i>Polypedilum</i>	64.49
16 Tanypodinae Mean Abundance (Family Functional Group)	5.50	2	<i>Cryptochironomus</i>	6.16
17 Chironomini Abundance (Family Functional Group)	104.50	3	Lumbriculidae	5.07
		4	<i>Thienemannimyia</i>	3.62
		5	<i>Tanytarsus</i>	3.26



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Station Number: S-408 Town: South Portland Date Deployed: 7/30/2015
Log Number: 2400 Waterbody: South Branch Long Creek - Station 408 Date Retrieved: 8/27/2015

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: ECOANALYSTS IDAHO

Waterbody Information - Deployment

Temperature: 23.8 deg C
Dissolved Oxygen: 7.84 mg/l
Dissolved Oxygen Saturation:
Specific Conductance: 1146 uS/cm
Velocity:
pH: 7.62
Wetted Width: 2.2 m
Bankfull Width: 3.7 m
Depth: 55 cm

Waterbody Information - Retrieval

Temperature: 21 deg C
Dissolved Oxygen: 8.1 mg/l
Dissolved Oxygen Saturation:
Specific Conductance: 1474 uS/cm
Velocity:
pH: 7.7
Wetted Width: 2 m
Bankfull Width: 3.7 m
Depth: 44 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Conifer	Dense	Flat
Upland Hardwood		
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Urban Runoff	Below Urban NPS	Detritus 5 %
		Gravel 5 %
		Sand 90 %

Landcover Summary - 2004 Data

Total Area (ac)	332	High Int. Dev. %	53.5	Water %	0.0	Non-vegetated %	0.0
		Med Int. Dev. %	6.2	Wetland %	1.0	Tilled Agriculture %	0.0
		Low Int. Dev. %	6.9	Upland Woody %	3.4	Grassland %	0.1
		Development %	66.7	Natural %	4.6	Human Altered %	95.4
						Impervious %	60.3

Sample Comments

7/30/2015: 93.3% DO.
8/27/2015: ONE BAG FULLY BURIED. 90.8% DO.



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report**

Station Number: S-408 Waterbody: South Branch Long Creek - Station 408 Town: South Portland
Log Number: 2400 Subsample Factor: X1 Replicates: 2 Calculated: 6/16/2016

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Oligochaeta	0802	1.00	1.00		--	0.7	0.7
Lumbriculidae	08020101	7.00	7.00		--	5.1	5.1
Tubificida	080202	1.50	1.50		--	1.1	1.1
Enchytraeidae	08020201	0.50	0.50		--	0.4	0.4
<i>Limnodrilus</i>	08020202022		2.50		CG		1.8
<i>Limnodrilus hoffmeisteri</i>	08020202022003	2.50			--	1.8	
<i>Placobdella</i>	08030101006		0.50		--		0.4
<i>Placobdella parasitica</i>	08030101006004	0.50			--	0.4	
<i>Nyctiophylax</i>	09020603009	1.00	1.00	5	PR	0.7	0.7
<i>Ptilostomis</i>	09020608041	0.50	0.50	5	SH	0.4	0.4
<i>Mystacides</i>	09020618075		1.50	4	CG		1.1
<i>Mystacides sepulchralis</i>	09020618075147	1.50			--	1.1	
<i>Chauliodes</i>	09020701001	1.00	1.00	4	PR	0.7	0.7
<i>Bezzia/palpomyia</i>	09021010043	0.50	0.50	6	PR	0.4	0.4
<i>Natarsia</i>	09021011011	0.50	0.50	8	PR	0.4	0.4
<i>Thienemannimyia</i>	09021011020		5.00	3	PR		3.6
<i>Thienemannimyia group</i>	09021011020041	5.00			--	3.6	
<i>Prodiamesa</i>	09021011031	1.50	1.50	3	CG	1.1	1.1
<i>Chaetocladius</i>	09021011035	0.50	0.50	6	CG	0.4	0.4
<i>Micropsectra</i>	09021011070	0.50	0.50	7	CG	0.4	0.4
<i>Tanytarsus</i>	09021011076	4.50	4.50	6	CF	3.3	3.3
<i>Chironomus</i>	09021011080	4.00	4.00	10	CG	2.9	2.9
<i>Cryptochironomus</i>	09021011082	8.50	8.50	8	PR	6.2	6.2
<i>Paratendipes</i>	09021011100	1.00	1.00	8	CG	0.7	0.7
<i>Phaenopsectra</i>	09021011101	2.00	2.00	7	SC	1.4	1.4
<i>Polypedilum</i>	09021011102		89.00	6	SH		64.5
<i>Polypedilum illinoense group</i>	09021011102185	0.50			--	0.4	
<i>Polypedilum scalaenum group</i>	09021011102189	85.00			--	61.6	
<i>Polypedilum halterale group</i>	09021011102193	3.50			--	2.5	
<i>Haliphus</i>	09021101001	0.50	0.50		P	0.4	0.4
Dytiscidae	09021103	1.00	1.00		--	0.7	0.7
<i>Dubiraphia</i>	09021113064	1.00	1.00	6	--	0.7	0.7
<i>Physa</i>	10010202027	1.00	1.00		SC	0.7	0.7