



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

Station Information

Station Number: S-411	River Basin: Saco
Waterbody: Long Creek - Station 411	HUC8 Name: Presumpscot
Town: Westbrook	Latitude: 43 38 50.55 N
Directions: SABLE OAKS BRANCH - 40 M UPSTREAM OF GOODYEAR TRIB	Longitude: 70 21 5.63 W
	Stream Order: 1

Sample Information

Log Number: 2397	Type of Sample: ROCK BAG	Date Deployed: 7/30/2015
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/27/2015

Classification Attainment

Statutory Class: B	Final Determination: C	Date: 6/14/2016
Model Result with $P \geq 0.6$: C	Reason for Determination: Model	
Date Last Calculated: 6/14/2016	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.00	Class A, B, or C	0.99
Class B	0.01	Non-Attainment	0.01
<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	183.33	18 Relative Abundance Ephemeroptera	0.12
02 Generic Richness	37.00	19 EPT Generic Richness	8.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	18.00
04 Ephemeroptera Mean Abundance	22.67	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.77	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	8.67
06 Hilsenhoff Biotic Index	6.22	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.19	28 EP Generic Richness/14	0.07
08 Relative Generic Richness Diptera	0.43	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	2.33		
12 EPT Generic Richness/ Diptera Generic Richness	0.50		
13 Relative Abundance - Oligochaeta	0.01		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	13.00		
17 Chironomini Abundance (Family Functional Group)	12.00		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Dubiraphia</i>	33.09
2	<i>Caenis</i>	12.36
3	<i>Helobdella</i>	9.09
4	<i>Procladius</i>	4.73
5	<i>Mystacides</i>	4.55



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: ECOANALYSTS IDAHO

Waterbody Information - Deployment

Temperature: 21.2 deg C
Dissolved Oxygen: 4.94 mg/l
Dissolved Oxygen Saturation:
Specific Conductance: 1131 uS/cm
Velocity:
pH: 7.52
Wetted Width: 1.62 m
Bankfull Width: 2.4 m
Depth: 21 cm

Waterbody Information - Retrieval

Temperature: 19.8 deg C
Dissolved Oxygen: 6.12 mg/l
Dissolved Oxygen Saturation:
Specific Conductance: 760 uS/cm
Velocity:
pH: 7.55
Wetted Width: 1.8 m
Bankfull Width: 2 m
Depth: 27.5 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Urban	Partly Open	Flat
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Below Urban NPS	Sand 20 %
Urban Runoff		Silt 80 %

Landcover Summary - 2004 Data

Total Area (ac)	646	High Int. Dev. %	12.6	Water %	0.0	Non-vegetated %	0.1
		Med Int. Dev. %	2.3	Wetland %	12.0	Tilled Agriculture %	0.7
		Low Int. Dev. %	6.2	Upland Woody %	21.5	Grassland %	2.9
		Development %	21.2	Natural %	33.6	Human Altered %	66.4
						Impervious %	18.5

Sample Comments

7/30/2015: 56% DO.
8/27/2015: 66.9% DO.



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

Station Number: S-411

Waterbody: Long Creek - Station 411

Town: Westbrook

Log Number: 2397

Subsample Factor: X1

Replicates: 3

Calculated: 6/14/2016

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Lumbriculidae	08020101	0.33	0.33		--	0.2	0.2
Tubificida	080202	2.33	2.33		--	1.3	1.3
<i>Actinobdella</i>	08030101001	0.33	0.33		--	0.2	0.2
<i>Glossiphonia</i>	08030101004		4.00		--		2.2
<i>Glossiphonia elegans</i>	08030101004001	4.00			--	2.2	
<i>Helobdella</i>	08030101005		16.67		--		9.1
<i>Helobdella modesta</i>	08030101005004	16.67			--	9.1	
<i>Macrobdella</i>	08030201002	0.33	0.33		--	0.2	0.2
<i>Hyaella</i>	09010203006	3.67	3.67	8	CG	2.0	2.0
<i>Argia</i>	09020309048	2.33	2.33	7	PR	1.3	1.3
<i>Caenis</i>	09020412040	22.67	22.67	7	CG	12.4	12.4
<i>Phylocentropus</i>	09020603011	4.33	4.33	5	CF	2.4	2.4
<i>Cheumatopsyche</i>	09020604015	2.33	2.33	5	CF	1.3	1.3
<i>Ptilostomis</i>	09020608041	1.67	1.67	5	SH	0.9	0.9
Limnephilidae	09020610				--		
<i>Limnephilus</i>	09020610055	0.33	0.33	3	SH	0.2	0.2
<i>Molanna</i>	09020615069	0.67	0.67	6	SC	0.4	0.4
<i>Mystacides</i>	09020618075		8.33	4	CG		4.5
<i>Mystacides sepulchralis</i>	09020618075147	8.33			--	4.5	
<i>Oecetis</i>	09020618078	6.33	6.33	8	PR	3.5	3.5
<i>Procladius</i>	09021011015	8.67	8.67	9	PR	4.7	4.7
<i>Thienemannimyia</i>	09021011020		4.33	3	PR		2.4
<i>Thienemannimyia group</i>	09021011020041	4.33			--	2.4	
<i>Parametriocnemus</i>	09021011053	0.67	0.67	5	CG	0.4	0.4
<i>Micropsectra</i>	09021011070	0.67	0.67	7	CG	0.4	0.4
<i>Paratanytarsus</i>	09021011071	0.67	0.67	6	--	0.4	0.4
<i>Rheotanytarsus</i>	09021011072		0.33	6	CF		0.2
<i>Rheotanytarsus exiguus group</i>	09021011072127	0.33			CF	0.2	
<i>Stempellinella</i>	09021011074	0.33	0.33	2	--	0.2	0.2
<i>Tanytarsus</i>	09021011076	6.33	6.33	6	CF	3.5	3.5
<i>Dicrotendipes</i>	09021011085	0.33	0.33	8	CG	0.2	0.2
<i>Microtendipes</i>	09021011094		1.33	6	CF		0.7
<i>Microtendipes pedellus group</i>	09021011094166	1.33			--	0.7	
<i>Parachironomus</i>	09021011097	0.33	0.33	10	PR	0.2	0.2
<i>Paralauterborniella</i>	09021011099		0.33	8	CG		0.2
<i>Paralauterborniella nigrohalteralis</i>	09021011099175	0.33			--	0.2	
<i>Paratendipes</i>	09021011100	2.33	2.33	8	CG	1.3	1.3



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<i>Phaenopsectra</i>	09021011101	2.67	2.67	7	SC	1.5	1.5
<i>Polypedilum</i>	09021011102	3.00	4.00	6	SH	1.6	2.2
<i>Polypedilum fallax group</i>	09021011102183	0.33			--	0.2	
<i>Polypedilum illinoense group</i>	09021011102185	0.67			--	0.4	
<i>Tribelos</i>	09021011107		0.67	5	CG		0.4
<i>Tribelos jucundus</i>	09021011107198	0.67			--	0.4	
<i>Dubiraphia</i>	09021113064	60.67	60.67	6	--	33.1	33.1
<i>Stenelmis</i>	09021113070	5.67	5.67	5	SC	3.1	3.1
<i>Amnicola</i>	10010104013	3.00	3.00		SC	1.6	1.6
<i>Pisidium</i>	10020201002	1.67	1.67		CF	0.9	0.9
<i>Sphaerium</i>	10020201003	1.67	1.67		CF	0.9	0.9