



**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: 2710	Type of Sample: ROCK BAG	Date Deployed: 7/9/2018
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/7/2018

Classification Attainment

Statutory Class: B	Final Determination: NA	Date: 11/14/2018
Model Result with P \geq 0.6: NA	Reason for Determination: Model	
Date Last Calculated: 11/13/2018	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	562.67	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	29.00	19 EPT Generic Richness	1.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	94.67
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.48	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	78.67
06 Hilsenhoff Biotic Index	6.84	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.46	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.41	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	0.08		
13 Relative Abundance - Oligochaeta	0.35		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	10.67		
17 Chironomini Abundance (Family Functional Group)	142.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	Tubificida	30.33
2	<i>Tanytarsus</i>	13.98
3	<i>Dicrotendipes</i>	13.98
4	<i>Gammarus</i>	9.24
5	<i>Cladopelma</i>	5.45



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Station Number: S-411 Town: Westbrook Date Deployed: 7/9/2018
Log Number: 2710 Waterbody: Long Creek - Station 411 Date Retrieved: 8/7/2018

Sample Collection and Processing Information

Sampling Organization: GZA GEOENVIRONMENTAL, INC. Taxonomist: AQUATIC RESOURCES CENTER, INC. - NASHVILLE, TN

Waterbody Information - Deployment

Temperature:
 Dissolved Oxygen:
 Dissolved Oxygen Saturation:
 Specific Conductance:
 Velocity:
 pH:
 Wetted Width: 7.14 m
 Bankfull Width: 9.19 m
 Depth: 41.8 cm

Waterbody Information - Retrieval

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Pasture	Open	Flat	
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
		Boulder	2 %
		Detritus	10 %
		Muck	85 %
		Rubble/Cobble	3 %

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



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

Station Number: S-411 Waterbody: Long Creek - Station 411 Town: Westbrook
Log Number: 2710 Subsample Factor: X4 Replicates: 3 Calculated: 11/13/2018

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Nematoda	05	4.00	4.00		--	0.7	0.7
Oligochaeta	0802	1.33	1.33		--	0.2	0.2
Tubificida	080202	170.67	170.67		--	30.3	30.3
<i>Dero</i>	08020202007	8.00	8.00		CG	1.4	1.4
<i>Aulodrilus</i>	08020202018	1.33	1.33		--	0.2	0.2
<i>Ilyodrilus</i>	08020202020	1.33	1.33		--	0.2	0.2
<i>Limnodrilus</i>	08020202022	12.00	12.00		CG	2.1	2.1
<i>Helobdella</i>	08030101005	16.00	16.00		--	2.8	2.8
<i>Gammarus</i>	09010201003	52.00	52.00	4	--	9.2	9.2
Coenagrionidae	09020309	2.67	2.67		--	0.5	0.5
<i>Limnephilus</i>	09020610055	1.33	1.33	3	SH	0.2	0.2
<i>Procladius</i>	09021011015	10.67	10.67	9	PR	1.9	1.9
<i>Cladotanytarsus</i>	09021011068	4.00	4.00	7	CG	0.7	0.7
<i>Paratanytarsus</i>	09021011071	24.00	24.00	6	--	4.3	4.3
<i>Tanytarsus</i>	09021011076	78.67	78.67	6	CF	14.0	14.0
<i>Chironomus</i>	09021011080	21.33	21.33	10	CG	3.8	3.8
<i>Cladopelma</i>	09021011081	30.67	30.67	9	CG	5.5	5.5
<i>Cryptotendipes</i>	09021011083	1.33	1.33	6	--	0.2	0.2
<i>Dicrotendipes</i>	09021011085	78.67	78.67	8	CG	14.0	14.0
<i>Endochironomus</i>	09021011087	4.00	4.00	10	SH	0.7	0.7
<i>Microtendipes</i>	09021011094	2.67	2.67	6	CF	0.5	0.5
<i>Paratendipes</i>	09021011100	1.33	1.33	8	CG	0.2	0.2
<i>Polypedilum</i>	09021011102	2.67	2.67	6	SH	0.5	0.5
<i>Ectopria</i>	09021109059	1.33	1.33	5	SC	0.2	0.2
<i>Dubiraphia</i>	09021113064	5.33	5.33	6	--	0.9	0.9
<i>Stenelmis</i>	09021113070	5.33	5.33	5	SC	0.9	0.9
<i>Limnesia</i>	09030112001	4.00	4.00		--	0.7	0.7
Hydrobiidae	10010104	6.67	6.67		--	1.2	1.2
<i>Amnicola</i>	10010104013	1.33	1.33		SC	0.2	0.2
Sphaeriidae	10020201	2.67			CF	0.5	
<i>Pisidium</i>	10020201002	2.67	4.00		CF	0.5	0.7
<i>Sphaerium</i>	10020201003	2.67	4.00		CF	0.5	0.7