



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

Station Information

Station Number: S-752	River Basin: Saco
Waterbody: Long Creek - Station 752	HUC8 Name: Presumpscot
Town: South Portland	Latitude: 43 38 11.9 N
Directions: ~30M UPSTREAM OF FODEN RD BY "ATLANTIC PLACE"	Longitude: 70 19 44.51 W
	Stream Order: 2

Sample Information

Log Number: 2706	Type of Sample: ROCK BAG	Date Deployed: 7/9/2018
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/7/2018

Classification Attainment

Statutory Class: C	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	0.01
Class B	0.00	Non-Attainment	0.99
		<u>A Model</u>	
<u>B or Better Model</u>		Class A	0.00
Class A or B	0.00	Class B or C or Non-Attainment	1.00
Class C or Non-Attainment	1.00		

Model Variables

01 Total Mean Abundance	517.33	18 Relative Abundance Ephemeroptera	0.01
02 Generic Richness	34.00	19 EPT Generic Richness	4.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	54.67
04 Ephemeroptera Mean Abundance	2.67	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.53	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	82.67
06 Hilsenhoff Biotic Index	6.32	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.52	28 EP Generic Richness/14	0.14
08 Relative Generic Richness Diptera	0.44	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	0.27		
13 Relative Abundance - Oligochaeta	0.02		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	13.33		
17 Chironomini Abundance (Family Functional Group)	154.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Gammarus</i>	30.93
2	<i>Tanytarsus</i>	15.98
3	<i>Stictochironomus</i>	11.60
4	<i>Chironomus</i>	8.25
5	<i>Dicrotendipes</i>	7.99



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Station Number: S-752 Town: South Portland Date Deployed: 7/9/2018
Log Number: 2706 Waterbody: Long Creek - Station 752 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: 19.6 deg C
Dissolved Oxygen: 5 mg/l
Dissolved Oxygen Saturation: 54.7 %
Specific Conductance: 1183 uS/cm
Velocity:
pH:
Wetted Width: 5.4 m
Bankfull Width: 7.11 m
Depth: 28.7 cm

Waterbody Information - Retrieval

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>	
		Boulder	3 %
		Clay	71 %
		Gravel	6 %
		Rubble/Cobble	20 %

Landcover Summary - 2004 Data

Sample Comments

YSI PRO 2030 USED FOR ALL HABITAT CHARACTERISTICS.



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

Station Number: S-752

Waterbody: Long Creek - Station 752

Town: South Portland

Log Number: 2706

Subsample Factor: X4

Replicates: 3

Calculated: 11/13/2018

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
Planariidae	03010101	1.33	1.33		--	0.3	0.3
Tubificida	080202	9.33	9.33		--	1.8	1.8
<i>Limnodrilus</i>	08020202022	2.67	2.67		CG	0.5	0.5
<i>Helobdella</i>	08030101005	13.33	13.33		--	2.6	2.6
<i>Placobdella</i>	08030101006	8.00	8.00		--	1.5	1.5
<i>Gammarus</i>	09010201003	160.00	160.00	4	--	30.9	30.9
<i>Crangonyx</i>	09010202004	1.33	1.33	8	--	0.3	0.3
<i>Acerpenna</i>	09020401007	1.33	1.33	5	CG	0.3	0.3
Heptageniidae	09020402	1.33	1.33		--	0.3	0.3
Hydropsychidae	09020604	1.33	1.33		--	0.3	0.3
<i>Ptilostomis</i>	09020608041	1.33	1.33	5	SH	0.3	0.3
<i>Procladius</i>	09021011015	13.33	13.33	9	PR	2.6	2.6
<i>Corynoneura</i>	09021011036	2.67	2.67	7	CG	0.5	0.5
<i>Nanocladius</i>	09021011049	1.33	1.33	3	CG	0.3	0.3
<i>Parakiefferiella</i>	09021011052	5.33	5.33		CG	1.0	1.0
<i>Thienemanniella</i>	09021011062	1.33	1.33	6	CG	0.3	0.3
<i>Paratanytarsus</i>	09021011071	5.33	5.33	6	--	1.0	1.0
<i>Rheotanytarsus</i>	09021011072	1.33	1.33	6	CF	0.3	0.3
<i>Tanytarsus</i>	09021011076	82.67	82.67	6	CF	16.0	16.0
<i>Chironomus</i>	09021011080	42.67	42.67	10	CG	8.2	8.2
<i>Cryptochironomus</i>	09021011082	2.67	2.67	8	PR	0.5	0.5
<i>Dicrotendipes</i>	09021011085	41.33	41.33	8	CG	8.0	8.0
<i>Phaenopsectra</i>	09021011101	1.33	1.33	7	SC	0.3	0.3
<i>Polypedilum</i>	09021011102	6.67	6.67	6	SH	1.3	1.3
<i>Stictochironomus</i>	09021011106	60.00	60.00	9	CG	11.6	11.6
<i>Simulium</i>	09021012047	2.67	2.67	4	CF	0.5	0.5
<i>Ancyronyx</i>	09021113063	2.67	2.67	6	--	0.5	0.5
<i>Dubiraphia</i>	09021113064	2.67	2.67	6	--	0.5	0.5
<i>Macronychus</i>	09021113065	4.00	4.00	4	--	0.8	0.8
<i>Stenelmis</i>	09021113070	5.33	5.33	5	SC	1.0	1.0
Hydrobiidae	10010104	6.67	6.67		--	1.3	1.3
Physidae	10010202	5.33	5.33		SC	1.0	1.0
Planorbidae	10010203	1.33	1.33		--	0.3	0.3
Sphaeriidae	10020201	8.00	8.00		CF	1.5	1.5
<i>Pisidium</i>	10020201002	9.33	9.33		CF	1.8	1.8