



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

**Station Information**

<b>Station Number:</b> S-753	River Basin: Saco
Waterbody: South Branch Long Creek - Station 753	HUC8 Name: Presumpscot
Town: South Portland	Latitude: 43° 38' 01.189" N
Directions: GORHAM RD, SHOPS AT CLARKS POND, BACK OF HOME DEPOT	Longitude: 70° 19' 17.045" W
	Stream Order: 1

**Sample Information**

<b>Log Number:</b> 3090	Type of Sample: ROCK BAG	Date Deployed: 7/6/2023
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/3/2023

**Classification Attainment**

<b>Statutory Class:</b> C	<b>Final Determination:</b> NA	Date: 1/16/2024
Model Result with $P \geq 0.6$ : NA	<b>Reason for Determination:</b> Model	
Date Last Calculated: 1/5/2024	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	0.01
Class C or Non-Attainment	1.00	Class B or C or Non-Attainment	0.99

**Model Variables**

01 Total Mean Abundance	105.00	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	27.00	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>	9.77
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.24	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	0.34
06 Hilsenhoff Biotic Index	5.25	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.31	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.56	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	0.07		

**Five Most Dominant Taxa**

	Rank	Taxon Name	Percent
13 Relative Abundance - Oligochaeta	1	<i>Gammarus</i>	37.46
15 Perlidae Mean Abundance (Family Functional Group)	2	<i>Rheotanytarsus</i>	11.55
16 Tanypodinae Mean Abundance (Family Functional Group)	3	<i>Bothrioneurum</i>	11.11
17 Chironomini Abundance (Family Functional Group)	4	<i>Micropsectra</i>	9.30
	5	<i>Nais</i>	7.41



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**Station Number: S-753**      Town: South Portland      Date Deployed: 7/6/2023  
**Log Number: 3090**      Waterbody: South Branch Long Creek - Station 753      Date Retrieved: 8/3/2023

**Sample Collection and Processing Information**

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

**Waterbody Information - Deployment**

Temperature: 19.5 deg C  
Dissolved Oxygen: 7.68 mg/l  
Dissolved Oxygen Saturation: 84 %  
Specific Conductance: 1301 uS/cm  
Velocity:  
pH:  
Wetted Width:  
Bankfull Width:  
Depth: 15 cm

**Waterbody Information - Retrieval**

Temperature: 17.1 deg C  
Dissolved Oxygen: 7.39 mg/l  
Dissolved Oxygen Saturation: 76.6 %  
Specific Conductance: 2215 uS/cm  
Velocity:  
pH:  
Wetted Width:  
Bankfull Width:  
Depth: 9 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Urban	Dense	Flat
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Urban Runoff	Below Road Crossing	Sand 90 %
		Silt 10 %

**Landcover Summary - 2004 Data**

**Sample Comments**



**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: 3090**      Subsample Factor: X1      Replicates: 3      Calculated: 1/5/2024

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Nematoda	05	0.33	0.33		--	0.3	0.3
Enchytraeidae	08020201	1.00	1.00		--	1.0	1.0
Naididae	08020202	21.33			--	20.3	
<i>Nais</i>	08020202009	0.67	7.78		CG	0.6	7.4
<i>Limnodrilus</i>	08020202022	0.33	3.89		CG	0.3	3.7
<i>Bothrioneurum</i>	08020202029	1.00	11.67		--	1.0	11.1
<i>Glossiphonia</i>	08030101004	0.33	0.33		--	0.3	0.3
<i>Gammarus</i>	09010201003	39.33	39.33	4	--	37.5	37.5
<i>Crangonyx</i>	09010202004	1.67	1.67	8	--	1.6	1.6
<i>Boyeria</i>	09020301004	1.00	1.00	2	PR	1.0	1.0
Polycentropodidae	09020603	0.33	0.33		--	0.3	0.3
<i>Dicranota</i>	09021001005	0.33	0.33	3	PR	0.3	0.3
Chironomidae	09021011	0.33			--	0.3	
<i>Conchapelopia</i>	09021011004	0.33	0.34	6	PR	0.3	0.3
<i>Thienemannimyia</i>	09021011020		0.34	3	PR		0.3
<i>Thienemannimyia group</i>	09021011020041	0.33			--	0.3	
<i>Corynoneura</i>	09021011036	0.67	0.67	7	CG	0.6	0.6
<i>Parakiefferiella</i>	09021011052	1.67	1.68		CG	1.6	1.6
<i>Paraphaenocladus</i>	09021011054	0.33	0.34	4	CG	0.3	0.3
<i>Micropsectra</i>	09021011070	9.67	9.77	7	CG	9.2	9.3
<i>Paratanytarsus</i>	09021011071	1.67	1.68	6	--	1.6	1.6
<i>Rheotanytarsus</i>	09021011072	12.00	12.12	6	CF	11.4	11.5
<i>Tanytarsus</i>	09021011076	0.33	0.34	6	CF	0.3	0.3
<i>Cryptochironomus</i>	09021011082	1.33	1.35	8	PR	1.3	1.3
<i>Polypedilum</i>	09021011102	0.33	0.34	6	SH	0.3	0.3
<i>Stictochironomus</i>	09021011106	4.00	4.04	9	CG	3.8	3.8
<i>Simulium</i>	09021012047	0.33	0.33	4	CF	0.3	0.3
<i>Neoplasta</i>	09021016064	0.33	0.33		PR	0.3	0.3
<i>Dubiraphia</i>	09021113064	2.33	2.33	6	--	2.2	2.2
Veneroida	100202	1.00	1.00		CF	1.0	1.0
<i>Pisidium</i>	10020201002	0.33	0.33		CF	0.3	0.3