



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

Station Information

Station Number: S-753	River Basin: Saco
Waterbody: South Branch Long Creek - Station 753	HUC8 Name: Presumpscot
Town: South Portland	Latitude: 43 38 1.16 N
Directions: GORHAM RD, SHOPS AT CLARKS POND, BACK OF HOME DEPOT	Longitude: 70 19 17.04 W
	Stream Order: 1

Sample Information

Log Number: 2705	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	0.00
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	489.33	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	24.00	19 EPT Generic Richness	0.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	14.67
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.40	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	2.67
06 Hilsenhoff Biotic Index	5.00	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	0.00
08 Relative Generic Richness Diptera	0.54	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	0.00		
13 Relative Abundance - Oligochaeta	0.02		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.33		
17 Chironomini Abundance (Family Functional Group)	70.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Gammarus</i>	59.67
2	<i>Stictochironomus</i>	9.26
3	<i>Physa</i>	8.45
4	Physidae	6.27
5	<i>Micropsectra</i>	3.00



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Station Number: S-753 Town: South Portland Date Deployed: 7/9/2018
Log Number: 2705 Waterbody: South Branch Long Creek - Station 753 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: 18.4 deg C
Dissolved Oxygen: 5.95 mg/l
Dissolved Oxygen Saturation: 64 %
Specific Conductance: 2772 uS/cm
Velocity:
pH:
Wetted Width: 3.58 m
Bankfull Width: 4.6 m
Depth: 25.6 cm

Waterbody Information - Retrieval

Temperature: 23.4 deg C
Dissolved Oxygen: 6.07 mg/l
Dissolved Oxygen Saturation: 71.7 %
Specific Conductance:
Velocity:
pH:
Wetted Width:
Bankfull Width:
Depth:

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>	
		Boulder	4 %
		Detritus	1 %
		Sand	95 %

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-753 Waterbody: South Branch Long Creek - Station 753 Town: South Portland
Log Number: 2705 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
<i>Tubificida</i>	080202	4.00	4.00		--	0.8	0.8
<i>Enchytraeidae</i>	08020201	2.67	2.67		--	0.5	0.5
<i>Limnodrilus</i>	08020202022	5.33	5.33		CG	1.1	1.1
<i>Gammarus</i>	09010201003	292.00	292.00	4	--	59.7	59.7
<i>Crangonyx</i>	09010202004	2.67	2.67	8	--	0.5	0.5
<i>Zavreliomyia</i>	09021011022	1.33	1.33	8	PR	0.3	0.3
<i>Prodiamesa</i>	09021011031	2.67	2.67	3	CG	0.5	0.5
<i>Limnophyes</i>	09021011047	1.33	1.33	8	CG	0.3	0.3
<i>Micropsectra</i>	09021011070	14.67	14.67	7	CG	3.0	3.0
<i>Rheotanytarsus</i>	09021011072	1.33	1.33	6	CF	0.3	0.3
<i>Tanytarsus</i>	09021011076	2.67	2.67	6	CF	0.5	0.5
<i>Chironomus</i>	09021011080	2.67	2.67	10	CG	0.5	0.5
<i>Cryptochironomus</i>	09021011082	8.00	8.00	8	PR	1.6	1.6
<i>Harnischia</i>	09021011090			8	CG		
<i>Microtendipes</i>	09021011094	1.33	1.33	6	CF	0.3	0.3
<i>Paratendipes</i>	09021011100	4.00	4.00	8	CG	0.8	0.8
<i>Phaenopsectra</i>	09021011101	5.33	5.33	7	SC	1.1	1.1
<i>Polypedilum</i>	09021011102	4.00	4.00	6	SH	0.8	0.8
<i>Stictochironomus</i>	09021011106	45.33	45.33	9	CG	9.3	9.3
<i>Agabus</i>	09021103016	1.33	1.33		PR	0.3	0.3
<i>Stenelmis</i>	09021113070	1.33	1.33	5	SC	0.3	0.3
<i>Physidae</i>	10010202	30.67	30.67		SC	6.3	6.3
<i>Physa</i>	10010202027	41.33	41.33		SC	8.4	8.4
<i>Planorbidae</i>	10010203	2.67	2.67		--	0.5	0.5
<i>Sphaeriidae</i>	10020201	5.33	5.33		CF	1.1	1.1
<i>Pisidium</i>	10020201002	5.33	5.33		CF	1.1	1.1