



**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' 11.934" N
Directions: ~30M UPSTREAM OF FODEN RD BY "ATLANTIC PLACE"	Longitude: 70° 19' 44.512" W
	Stream Order: 2

Sample Information

Log Number: 3088	Type of Sample: ROCK BAG	Date Deployed: 7/6/2023
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/3/2023

Classification Attainment

Statutory Class: C	Final Determination: NA	Date: 1/16/2024
Model Result with P≥0.6: NA	Reason for Determination: 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	0.00
Class C or Non-Attainment	1.00	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Mean Abundance	102.00	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	30.00	19 EPT Generic Richness	4.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	4.00
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.73	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	5.33
06 Hilsenhoff Biotic Index	5.19	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.34	28 EP Generic Richness/14	0.00
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	2.67		
12 EPT Generic Richness/ Diptera Generic Richness	0.31		

Five Most Dominant Taxa

	Rank	Taxon Name	Percent
13 Relative Abundance - Oligochaeta	1	<i>Gammarus</i>	25.82
15 Perlidae Mean Abundance (Family Functional Group)	2	<i>Rheotanytarsus</i>	16.67
16 Tanypodinae Mean Abundance (Family Functional Group)	3	<i>Macronychus</i>	12.42
17 Chironomini Abundance (Family Functional Group)	4	<i>Paratanytarsus</i>	7.19
	5	<i>Caecidotea</i>	5.88



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Station Number: S-752 Town: South Portland Date Deployed: 7/6/2023
Log Number: 3088 Waterbody: Long Creek - Station 752 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: 20.7 deg C
Dissolved Oxygen: 7.25 mg/l
Dissolved Oxygen Saturation: 81.2 %
Specific Conductance: 463.3 uS/cm
Velocity:
pH:
Wetted Width:
Bankfull Width:
Depth: 35 cm

Waterbody Information - Retrieval

Temperature: 16.5 deg C
Dissolved Oxygen: 6.71 mg/l
Dissolved Oxygen Saturation: 68 %
Specific Conductance: 959 uS/cm
Velocity:
pH:
Wetted Width:
Bankfull Width:
Depth: 20 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>
Urban Runoff	Main Stem	Gravel 10 %
		Rubble/Cobble 10 %
		Sand 40 %
		Silt 40 %

Landcover Summary - 2004 Data

Total Area (ac)	1482	High Int. Dev. % 17.8	Water % 0.0	Non-vegetated % 0.2
		Med Int. Dev. % 6.4	Wetland % 9.7	Tilled Agriculture % 0.6
		Low Int. Dev. % 5.2	Upland Woody % 26.6	Grassland % 2.8
		Development % 29.4	Natural % 39.3	Human Altered % 63.4
				Impervious % 23.8

Sample Comments



**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: 3088

Subsample Factor: X1

Replicates: 3

Calculated: 1/5/2024

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
<i>Nais</i>	08020202009	0.67	0.67		CG	0.7	0.7
<i>Glossiphonia</i>	08030101004	2.00	2.00		--	2.0	2.0
<i>Helobdella</i>	08030101005	1.33	1.33		--	1.3	1.3
<i>Caecidotea</i>	09010101001	6.00	6.00	8	SH	5.9	5.9
<i>Gammarus</i>	09010201003	26.33	26.33	4	--	25.8	25.8
<i>Nyctiophylax</i>	09020603009	1.00	1.00	5	PR	1.0	1.0
<i>Cheumatopsyche</i>	09020604015	2.67	2.67	5	CF	2.6	2.6
<i>Ptilostomis</i>	09020608041	2.33	2.33	5	SH	2.3	2.3
Lepidostomatidae	09020611				--		
Leptoceridae	09020618				--		
<i>Mystacides</i>	09020618075	3.33	3.33	4	CG	3.3	3.3
<i>Conchapelopia</i>	09021011004	0.33	0.33	6	PR	0.3	0.3
<i>Procladius</i>	09021011015	0.33	0.33	9	PR	0.3	0.3
<i>Corynoneura</i>	09021011036	1.33	1.33	7	CG	1.3	1.3
<i>Parakiefferiella</i>	09021011052	0.33	0.33		CG	0.3	0.3
<i>Tvetenia</i>	09021011065	0.33	0.33	5	CG	0.3	0.3
<i>Micropsectra</i>	09021011070	1.33	1.33	7	CG	1.3	1.3
<i>Paratanytarsus</i>	09021011071	7.33	7.33	6	--	7.2	7.2
<i>Rheotanytarsus</i>	09021011072	17.00	17.00	6	CF	16.7	16.7
<i>Stempellinella</i>	09021011074	0.33	0.33	2	--	0.3	0.3
<i>Tanytarsus</i>	09021011076	2.67	2.67	6	CF	2.6	2.6
<i>Dicrotendipes</i>	09021011085	1.33	1.33	8	CG	1.3	1.3
<i>Polypedilum</i>	09021011102	2.00	2.00	6	SH	2.0	2.0
<i>Simulium</i>	09021012047	0.33	0.33	4	CF	0.3	0.3
<i>Ancyronyx</i>	09021113063	2.00	2.00	6	--	2.0	2.0
<i>Dubiraphia</i>	09021113064	1.33	1.33	6	--	1.3	1.3
<i>Macronychus</i>	09021113065	12.67	12.67	4	--	12.4	12.4
<i>Stenelmis</i>	09021113070	2.67	2.67	5	SC	2.6	2.6
Hydrobiidae	10010104	0.33	0.33		--	0.3	0.3
Physidae	10010202	0.67	0.67		SC	0.7	0.7
<i>Physella</i>	10010202027	0.67	0.67		SC	0.7	0.7
<i>Ferrissia</i>	10010204035	1.00	1.00		SC	1.0	1.0