



**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: 2784	Type of Sample: ROCK BAG	Date Deployed: 7/18/2019
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/13/2019

Classification Attainment

Statutory Class: C	Final Determination: NA	Date: 1/10/2020
Model Result with $P \geq 0.6$: NA	Reason for Determination: Model	
Date Last Calculated: 1/3/2020	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	510.67	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	38.00	19 EPT Generic Richness	4.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	38.74
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.75	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	81.81
06 Hilsenhoff Biotic Index	5.31	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.45	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.37	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	0.29		
13 Relative Abundance - Oligochaeta	0.11		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	10.73		
17 Chironomini Abundance (Family Functional Group)	32.19		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Gammarus</i>	27.68
2	<i>Tanytarsus</i>	15.76
3	<i>Parakiefferiella</i>	13.66
4	<i>Aulodrilus</i>	5.95
5	<i>Helobdella</i>	5.22



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Sample Collection and Processing Information

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

Waterbody Information - Deployment

Temperature: 20.2 deg C
Dissolved Oxygen: 4.81 mg/l
Dissolved Oxygen Saturation: 53.1 %
Specific Conductance: 975 uS/cm
Velocity:
pH:
Wetted Width: 5.18 m
Bankfull Width: 7.11 m
Depth:

Waterbody Information - Retrieval

Temperature: 19.5 deg C
Dissolved Oxygen: 4.42 mg/l
Dissolved Oxygen Saturation: 48 %
Specific Conductance: 1034 uS/cm
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	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
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Aquatic Life Taxonomic Inventory Report**

Station Number: S-752

Waterbody: Long Creek - Station 752

Town: South Portland

Log Number: 2784

Subsample Factor: X4

Replicates: 3

Calculated: 1/3/2020

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
Enchytraeidae	08020201	2.67	2.67		--	0.5	0.5
Naididae	08020202	42.67			--	8.4	
<i>Dero</i>	08020202007	2.67	12.15		CG	0.5	2.4
<i>Nais</i>	08020202009	1.33	6.07		CG	0.3	1.2
<i>Aulodrilus</i>	08020202018	6.67	30.37		--	1.3	5.9
<i>Limnodrilus</i>	08020202022	1.33	6.07		CG	0.3	1.2
<i>Helobdella</i>	08030101005	26.67	26.67		--	5.2	5.2
<i>Placobdella</i>	08030101006	1.33	1.33		--	0.3	0.3
<i>Caecidotea</i>	09010101001	4.00	4.00	8	SH	0.8	0.8
<i>Gammarus</i>	09010201003	141.33	141.33	4	--	27.7	27.7
Coenagrionidae	09020309	4.00	4.00		--	0.8	0.8
<i>Nyctiophylax</i>	09020603009	1.33	1.33	5	PR	0.3	0.3
<i>Phylocentropus</i>	09020603011	2.67	2.67	5	CF	0.5	0.5
<i>Limnephilus</i>	09020610055	1.33	1.33	3	SH	0.3	0.3
Lepidostomatidae	09020611				--		
Leptoceridae	09020618				--		
<i>Mystacides</i>	09020618075	1.33	1.33	4	CG	0.3	0.3
Chironomidae	09021011	1.33			--	0.3	
<i>Natarsia</i>	09021011011	1.33	1.34	8	PR	0.3	0.3
<i>Procladius</i>	09021011015	9.33	9.39	9	PR	1.8	1.8
<i>Cricotopus</i>	09021011037	1.33	1.34	7	SH	0.3	0.3
<i>Parakiefferiella</i>	09021011052	69.33	69.74		CG	13.6	13.7
<i>Cladotanytarsus</i>	09021011068	2.67	2.68	7	CG	0.5	0.5
<i>Micropsectra</i>	09021011070	5.33	5.36	7	CG	1.0	1.1
<i>Paratanytarsus</i>	09021011071	22.67	22.80	6	--	4.4	4.5
<i>Stempellinella</i>	09021011074	4.00	4.02	2	--	0.8	0.8
<i>Tanytarsus</i>	09021011076	80.00	80.47	6	CF	15.7	15.8
<i>Dicrotendipes</i>	09021011085	6.67	6.71	8	CG	1.3	1.3
<i>Kiefferulus</i>	09021011091	1.33	1.34	10	CG	0.3	0.3
<i>Paratendipes</i>	09021011100	2.67	2.68	8	CG	0.5	0.5
<i>Polypedilum</i>	09021011102	9.33	9.39	6	SH	1.8	1.8
<i>Stictochironomus</i>	09021011106	12.00	12.07	9	CG	2.3	2.4
<i>Ancyronyx</i>	09021113063	1.33	1.33	6	--	0.3	0.3
<i>Macronychus</i>	09021113065	10.67	10.67	4	--	2.1	2.1
Valvatidae	10010101	1.33	1.33		--	0.3	0.3
Hydrobiidae	10010104	6.67	6.67		--	1.3	1.3
Physidae	10010202	1.33	1.33		SC	0.3	0.3



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		Actual	Adjusted			Actual	Adjusted
<i>Physa</i>	10010202027	9.33	9.33		SC	1.8	1.8
<i>Helisoma</i>	10010203030	1.33	1.33		SC	0.3	0.3
Ancylidae	10010204	1.33	1.33		SC	0.3	0.3
<i>Pisidium</i>	10020201002	4.00	4.00		CF	0.8	0.8
<i>Sphaerium</i>	10020201003	2.67	2.67		CF	0.5	0.5