



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

Station Information

Station Number: S-257	River Basin: Saco
Waterbody: Capisic Brook - Station 257	HUC8 Name: Presumpscot
Town: Portland	Latitude: 43 40 13.27 N
Directions: 50 M BELOW LUCAS ST. BRIDGE CROSSING	Longitude: 70 18 30.4 W
	Stream Order: 2

Sample Information

Log Number: 2808	Type of Sample: ROCK BAG	Date Deployed: 7/6/2020
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/3/2020

Classification Attainment

Statutory Class: C	Final Determination: NA	Date: 3/3/2022
Model Result with $P \geq 0.6$: NA	Reason for Determination: Model	
Date Last Calculated: 10/15/2021	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	881.67	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	24.00	19 EPT Generic Richness	3.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	11.67
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	1.15	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	32.00
06 Hilsenhoff Biotic Index	4.27	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.11	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.29	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.67		
12 EPT Generic Richness/ Diptera Generic Richness	0.43		
13 Relative Abundance - Oligochaeta	0.03		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	0.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Gammarus</i>	82.27
2	<i>Paratanytarsus</i>	6.96
3	<i>Limnodrilus</i>	3.40
4	<i>Tanytarsus</i>	3.10
5	<i>Helobdella</i>	1.32



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Station Number: S-257 Town: Portland Date Deployed: 7/6/2020
Log Number: 2808 Waterbody: Capisic Brook - Station 257 Date Retrieved: 8/3/2020

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: LOTIC INC.

Waterbody Information - Deployment

Temperature: 18.1 deg C
Dissolved Oxygen: 7.97 mg/l
Dissolved Oxygen Saturation: 83.6 %
Specific Conductance: 439.5 uS/cm
Velocity: 11.3 cm/s
pH: 7.4
Wetted Width: 3.75 m
Bankfull Width: 4.45 m
Depth: 27 cm

Waterbody Information - Retrieval

Temperature: 23.3 deg C
Dissolved Oxygen: 7.08 mg/l
Dissolved Oxygen Saturation: 84.1 %
Specific Conductance: 1043 uS/cm
Velocity: 0.1 cm/s
pH: 7.38
Wetted Width: 2.7 m
Bankfull Width: 4.5 m
Depth: 22 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Swamp Hardwood Urban	Partly Open	Flat
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Below Road Crossing	Boulder 10 %
Urban Runoff	Below Urban NPS	Clay 10 % Gravel 15 % Rubble/Cobble 15 % Sand 40 % Silt 10 %

Landcover Summary - 2004 Data

Total Area (ac) 1487	High Int. Dev. %	19.2	Water %	0.2	Non-vegetated %	0.1	
	Med Int. Dev. %	10.2	Wetland %	0.0	Tilled Agriculture %	0.1	
	Low Int. Dev. %	24.2	Upland Woody %	14.9	Grassland %	0.0	
	Development %	53.6	Natural %	15.0	Human Altered %	84.9	
						Impervious %	34.5
Total Land (ac) 1485	High Int. Dev. %	19.3	Water %	N/A	Non-vegetated %	N/A	
	Med Int. Dev. %	10.2	Wetland %	0.0	Tilled Agriculture %	0.1	
	Low Int. Dev. %	24.2	Upland Woody %	14.9	Grassland %	0.0	
	Development %	53.7	Natural %	15.0	Human Altered %	85.0	
						Impervious %	34.6

Sample Comments

VISIBLE FLOW. WATER GRAY/MILKY (URBAN STORMWATER APPEARANCE).



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

Station Number: S-257

Waterbody: Capisic Brook - Station 257

Town: Portland

Log Number: 2808

Subsample Factor: X1

Replicates: 3

Calculated: 10/15/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Tricladida	030101	0.33	0.33		--	0.0	0.0
Naididae	08020202	0.67	0.67		--	0.1	0.1
<i>Limnodrilus</i>	08020202022		30.00		CG		3.4
<i>Limnodrilus hoffmeisteri</i>	08020202022003	30.00			--	3.4	
<i>Glossiphonia</i>	08030101004		1.33		--		0.2
<i>Glossiphonia elegans</i>	08030101004001	1.33			--	0.2	
<i>Helobdella</i>	08030101005		11.67		--		1.3
<i>Helobdella stagnalis complex</i>	08030101005004	11.67			--	1.3	
<i>Erpobdella</i>	08030203002	5.33	5.33		--	0.6	0.6
<i>Caecidotea</i>	09010101001	8.33	8.33	8	SH	0.9	0.9
<i>Gammarus</i>	09010201003		725.33	4	--		82.3
<i>Gammarus fasciatus</i>	09010201003003	725.33			--	82.3	
Collembola	090201	0.33	0.33		--	0.0	0.0
<i>Phylocentropus</i>	09020603011	0.67	0.67	5	CF	0.1	0.1
<i>Cheumatopsyche</i>	09020604015	0.67	0.67	5	CF	0.1	0.1
<i>Oligostomis</i>	09020608039	0.33	0.33	2	PR	0.0	0.0
Lepidoptera	090209	0.33	0.33		--	0.0	0.0
<i>Antocha</i>	09021001004	0.33	0.33	3	CG	0.0	0.0
Chironomidae	09021011				--		
<i>Cricotopus</i>	09021011037		4.00	7	SH		0.5
<i>Cricotopus sylvestris group</i>	09021011037079	4.00			SH	0.5	
<i>Paratanytarsus</i>	09021011071	61.33	61.33	6	--	7.0	7.0
<i>Tanytarsus</i>	09021011076	27.33	27.33	6	CF	3.1	3.1
<i>Polypedilum</i>	09021011102		0.67	6	SH		0.1
<i>Polypedilum aviceps</i>	09021011102181	0.67			--	0.1	
<i>Odontomesa</i>	09021011121	0.33	0.33	4	--	0.0	0.0
<i>Neoplasta</i>	09021016064	0.33	0.33		PR	0.0	0.0
<i>Dubiraphia</i>	09021113064	0.67	0.67	6	--	0.1	0.1
<i>Promoresia</i>	09021113069	0.33	0.33		--	0.0	0.0
Physidae	10010202	0.33	0.33		SC	0.0	0.0
<i>Sphaerium</i>	10020201003	0.67	0.67		CF	0.1	0.1