



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

**Station Information**

<b>Station Number:</b> S-1064	River Basin: Saco
Waterbody: Mare Brook - Station 1064	HUC8 Name: Presumpscot
Town: Brunswick	Latitude: 43 54 1.37 N
Directions: 80M BELOW BARROWS STREET CROSSING. PARK ON RICHARDS DRIVE.	Longitude: 69 58 18.7 W
	Stream Order: 1

**Sample Information**

<b>Log Number:</b> 2812	Type of Sample: ROCK BAG	Date Deployed: 7/17/2020
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/10/2020

**Classification Attainment**

<b>Statutory Class:</b> B	<b>Final Determination:</b> C	Date: 5/12/2021
Model Result with $P \geq 0.6$ : C	<b>Reason for Determination:</b> Model	
Date Last Calculated: 5/12/2021	Comments:	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.00	Class A, B, or C	0.99
Class B	0.01	Non-Attainment	0.01
		<u>A Model</u>	
<u>B or Better Model</u>		Class A	0.00
Class A or B	0.00	Class B or C or Non-Attainment	1.00
Class C or Non-Attainment	1.00		

**Model Variables**

01 Total Mean Abundance	608.00	18 Relative Abundance Ephemeroptera	0.03
02 Generic Richness	27.00	19 EPT Generic Richness	7.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	13.00
04 Ephemeroptera Mean Abundance	18.67	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.42	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	59.33
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	0.32	28 EP Generic Richness/14	0.14
08 Relative Generic Richness Diptera	0.52	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	0.50		
13 Relative Abundance - Oligochaeta	0.06		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	3.33		
17 Chironomini Abundance (Family Functional Group)	11.33		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Caecidotea</i>	25.66
2	<i>Prodiamesa</i>	14.31
3	<i>Gammarus</i>	12.88
4	<i>Dicranota</i>	10.75
5	<i>Tanytarsus</i>	9.65



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**Station Number: S-1064**      Town: Brunswick      Date Deployed: 7/17/2020  
**Log Number: 2812**      Waterbody: Mare Brook - Station 1064      Date Retrieved: 8/10/2020

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: LOTIC INC.

**Waterbody Information - Deployment**

Temperature: 13.9 deg C  
Dissolved Oxygen: 9.87 mg/l  
Dissolved Oxygen Saturation: 94.8 %  
Specific Conductance: 317.5 uS/cm  
Velocity:  
pH: 6.79  
Wetted Width: 3.5 m  
Bankfull Width: 4.6 m  
Depth: 21 cm

**Waterbody Information - Retrieval**

Temperature: 16.8 deg C  
Dissolved Oxygen: 9.15 mg/l  
Dissolved Oxygen Saturation: 94 %  
Specific Conductance: 279.7 uS/cm  
Velocity: 12.2 cm/s  
pH: 6.73  
Wetted Width: 3.5 m  
Bankfull Width: 2.8 m  
Depth: 19 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Hardwood	Dense	Rolling	
Urban			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Urban Runoff	Below Road Crossing	Sand	80 %
		Silt	10 %

**Landcover Summary - 2004 Data**

**Sample Comments**



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

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**Log Number: 2812**      Subsample Factor: X1      Replicates: 3      Calculated: 5/12/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Lumbriculidae	08020101	33.67	33.67		--	5.5	5.5
<i>Nais</i>	08020202009	0.33	0.33		CG	0.1	0.1
<i>Helobdella</i>	08030101005		13.00		--		2.1
<i>Helobdella stagnalis complex</i>	08030101005004	13.00			--	2.1	
<i>Caecidotea</i>	09010101001	156.00	156.00	8	SH	25.7	25.7
<i>Gammarus</i>	09010201003	78.33	78.33	4	--	12.9	12.9
Baetidae	09020401	2.00	2.00		--	0.3	0.3
<i>Baetis</i>	09020401001		16.67	4	CG		2.7
<i>Baetis brunneicolor</i>	09020401001003	16.67			--	2.7	
<i>Phylocentropus</i>	09020603011	1.33	1.33	5	CF	0.2	0.2
<i>Diplectrona</i>	09020604014	10.00	10.00	0	CF	1.6	1.6
<i>Oligostomis</i>	09020608039	3.67	3.67	2	PR	0.6	0.6
<i>Limnephilus</i>	09020610055	19.00	19.00	3	SH	3.1	3.1
<i>Psychoglypha</i>	09020610060	1.00	1.00	0	SH	0.2	0.2
<i>Dicranota</i>	09021001005	65.33	65.33	3	PR	10.7	10.7
<i>Hexatoma</i>	09021001008	1.67	1.67	2	PR	0.3	0.3
Chironomidae	09021011				--		
<i>Thienemannimyia</i>	09021011020		3.33	3	PR		0.5
<i>Thienemannimyia group</i>	09021011020041	3.33			--	0.5	
<i>Prodiamesa</i>	09021011031		87.00	3	CG		14.3
<i>Prodiamesa olivacea</i>	09021011031048	87.00			--	14.3	
<i>Corynoneura</i>	09021011036	1.00	1.00	7	CG	0.2	0.2
<i>Cricotopus</i>	09021011037	0.67	0.67	7	SH	0.1	0.1
<i>Parametriocnemus</i>	09021011053	0.33	0.33	5	CG	0.1	0.1
<i>Thienemanniella</i>	09021011062	2.00	2.00	6	CG	0.3	0.3
<i>Paratanytarsus</i>	09021011071	4.33	4.33	6	--	0.7	0.7
<i>Rheotanytarsus</i>	09021011072	2.33	2.33	6	CF	0.4	0.4
<i>Tanytarsus</i>	09021011076	58.67	58.67	6	CF	9.6	9.6
<i>Polypedilum</i>	09021011102		11.33	6	SH		1.9
<i>Polypedilum scalaenum group</i>	09021011102189	0.67			--	0.1	
<i>Polypedilum halterale group</i>	09021011102193	10.67			--	1.8	
<i>Odontomesa</i>	09021011121	25.33	25.33	4	--	4.2	4.2
<i>Simulium</i>	09021012047	9.33	9.33	4	CF	1.5	1.5
<i>Oreodytes</i>	09021103015	0.33	0.33		PR	0.1	0.1