



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

Station Information

Station Number: S-1115	River Basin: Maine Coastal
Waterbody: Creamer Brook - Station 1115	HUC8 Name: Maine Coastal
Town: T19 Ed Bpp	Latitude: 44 58 16.07 N
Directions: SITE IS DOWNSTREAM OF THE OLD BRIDGE LOCATION.	Longitude: 67 30 33.57 W
	Stream Order: 2

Sample Information

Log Number: 2980	Type of Sample: ROCK BAG	Date Deployed: 7/14/2022
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/23/2022

Classification Attainment

Statutory Class: AA	Final Determination: A	Date: 9/8/2023
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 8/25/2023	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.75	Class A, B, or C	1.00
Class B	0.24	Non-Attainment	0.00
		<u>A Model</u>	
<u>B or Better Model</u>		Class A	0.82
Class A or B	1.00	Class B or C or Non-Attainment	0.18
Class C or Non-Attainment	0.00		

Model Variables

01 Total Mean Abundance	121.33	18 Relative Abundance Ephemeroptera	0.62
02 Generic Richness	21.00	19 EPT Generic Richness	7.00
03 Plecoptera Mean Abundance	1.33	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	75.33	23 Relative Generic Richness- Plecoptera	0.05
05 Shannon-Wiener Generic Diversity	2.85	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	7.33
06 Hilsenhoff Biotic Index	2.84	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	3.33
07 Relative Abundance - Chironomidae	0.24	28 EP Generic Richness/14	0.29
08 Relative Generic Richness Diptera	0.43	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	0.78		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	6.33		
17 Chironomini Abundance (Family Functional Group)	8.00		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Paraleptophlebia</i>	42.31
2	<i>Ephemerella</i>	17.03
3	<i>Polycentropus</i>	9.07
4	<i>Polypedilum</i>	6.59
5	<i>Psectrocladius</i>	5.49
6	<i>Tanytarsus</i>	5.49



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Station Number: S-1115

Town: T19 Ed Bpp

Date Deployed: 7/14/2022

Log Number: 2980

Waterbody: Creamer Brook - Station 1115

Date Retrieved: 8/23/2022

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: LOTIC INC.

Waterbody Information - Deployment

Temperature: 17.8 deg C
 Dissolved Oxygen: 10.07 mg/l
 Dissolved Oxygen Saturation: 106 %
 Specific Conductance: 30.5 uS/cm
 Velocity: 1 cm/s
 pH: 6.41
 Wetted Width: 4 m
 Bankfull Width: 6.6 m
 Depth: 25 cm

Waterbody Information - Retrieval

Water Chemistry - 7/14/2022

Chloride	2 mg/l	Nitrate + Nitrite As Nitrogen	0.07 mg/l
Nitrate As Nitrogen	0.07 mg/l	Nitrite As Nitrogen	<0.01 mg/l
Total Alkalinity	5 mg/l	Total Kjeldahl Nitrogen (organic A	0.4 mg/l
Total Phosphorus Mixed Forms (po	15 ug/l		

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Conifer	Partly Open	Rolling	
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Logging	Below Forestry NPS	Boulder	35 %
		Gravel	20 %
		Rubble/Cobble	35 %
		Sand	10 %

Landcover Summary - 2004 Data

Sample Comments



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

Station Number: S-1115 Waterbody: Creamer Brook - Station 1115 Town: T19 Ed Bpp
Log Number: 2980 Subsample Factor: X1 Replicates: 3 Calculated: 8/25/2023

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Leuctra</i>	09020204020	1.33	1.33	0	SH	1.1	1.1
<i>Boyeria</i>	09020301004	1.00	1.00	2	PR	0.8	0.8
<i>Sympetrum</i>	09020306041	0.33	0.33	10	PR	0.3	0.3
<i>Lestes</i>	09020308045	1.00	1.00	9	PR	0.8	0.8
<i>Maccaffertium</i>	09020402015		3.33	4	SC		2.7
<i>Maccaffertium vicarium</i>	09020402015055	3.33			--	2.7	
<i>Paraleptophlebia</i>	09020406026	51.33	51.33	1	CG	42.3	42.3
<i>Ephemerella</i>	09020410035	20.67	20.67	1	CG	17.0	17.0
<i>Polycentropus</i>	09020603010	11.00	11.00	6	PR	9.1	9.1
<i>Lepidostoma</i>	09020611064	0.67	0.67	1	SH	0.5	0.5
<i>Psilotreta</i>	09020614068	0.33	0.33	0	SC	0.3	0.3
<i>Nigronia</i>	09020701003	0.33	0.33	0	PR	0.3	0.3
Lepidoptera	090209	0.33	0.33		--	0.3	0.3
<i>Tipula</i>	09021001002	0.33	0.33	4	SH	0.3	0.3
<i>Labrundinia</i>	09021011008	1.33	1.33	7	PR	1.1	1.1
<i>Thienemannimyia</i>	09021011020		5.00	3	PR		4.1
<i>Thienemannimyia group</i>	09021011020041	5.00			--	4.1	
<i>Cricotopus</i>	09021011037	0.67	0.67	7	SH	0.5	0.5
<i>Psectrocladius</i>	09021011056	6.67	6.67	8	CG	5.5	5.5
<i>Tvetenia</i>	09021011065		0.67	5	CG		0.5
<i>Tvetenia paucunca</i>	09021011065114	0.67			--	0.5	
<i>Paratanytarsus</i>	09021011071	0.33	0.33	6	--	0.3	0.3
<i>Tanytarsus</i>	09021011076	6.67	6.67	6	CF	5.5	5.5
<i>Polypedilum</i>	09021011102		8.00	6	SH		6.6
<i>Polypedilum illinoense group</i>	09021011102185	8.00			--	6.6	