



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

**Station Information**

<b>Station Number:</b> S-1027	River Basin: St. John
Waterbody: Unnamed Brook (presque Isle) - Station 1027	HUC8 Name: Aroostook
Town: Presque Isle	Latitude: 46° 44' 52.270" N
Directions: 60M UPSTREAM OF ROUTE 205 CROSSING (PARKHURST SIDING RD)	Longitude: 67° 57' 23.112" W
	Stream Order: 2

**Sample Information**

<b>Log Number:</b> 2731	Type of Sample: ROCK BAG	Date Deployed: 7/10/2019
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/6/2019

**Classification Attainment**

<b>Statutory Class:</b> B	<b>Final Determination:</b> I	Date: 1/4/2021
Model Result with $P \geq 0.6$ : I	<b>Reason for Determination:</b> Model	
Date Last Calculated: 12/23/2020	Comments: Resample because the mean total abundance (24) is less than the minimum required (5) for running the model. Does not look like a clear toxicity issue because of sensitive taxa present.	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.97	Class A, B, or C	1.00
Class B	0.03	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.99	Class A	1.00
Class C or Non-Attainment	0.01	Class B or C or Non-Attainment	0.00

**Model Variables**

01 Total Mean Abundance	24.33	18 Relative Abundance Ephemeroptera	0.14
02 Generic Richness	19.00	19 EPT Generic Richness	9.00
03 Plecoptera Mean Abundance	1.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	1.67
04 Ephemeroptera Mean Abundance	3.33	23 Relative Generic Richness- Plecoptera	0.11
05 Shannon-Wiener Generic Diversity	3.12	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	0.00
06 Hilsenhoff Biotic Index	1.94	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.19	28 EP Generic Richness/14	0.36
08 Relative Generic Richness Diptera	0.42	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	1.13		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.33		
17 Chironomini Abundance (Family Functional Group)	0.00		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Psychoglypha</i>	38.36
2	<i>Hesperophylax</i>	16.44
3	<i>Paraleptophlebia</i>	10.96
4	<i>Micropsectra</i>	6.85
5	<i>Leuctra</i>	4.11



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Aquatic Life Classification Attainment Report**

**Station Number: S-1027**      Town: Presque Isle      Date Deployed: 7/10/2019  
**Log Number: 2731**      Waterbody: Unnamed Brook (presque Isle) - Station 1027      Date Retrieved: 8/6/2019

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: MICHAEL COLE

Waterbody Information - Deployment		Waterbody Information - Retrieval	
Temperature:	13.2 deg C	Temperature:	12.8 deg C
Dissolved Oxygen:	10.6 mg/l	Dissolved Oxygen:	11.01 mg/l
Dissolved Oxygen Saturation:	100.7 %	Dissolved Oxygen Saturation:	104.2 %
Specific Conductance:	390.1 uS/cm	Specific Conductance:	406.2 uS/cm
Velocity:	3 cm/s	Velocity:	3 cm/s
pH:	8.27	pH:	8.44
Wetted Width:	3 m	Wetted Width:	3.1 m
Bankfull Width:	5 m	Bankfull Width:	5.4 m
Depth:	34 cm	Depth:	23 cm

**Water Chemistry - 7/10/2019**

Nitrate + Nitrite As Nitrogen	2 mg/l	Nitrate As Nitrogen	2 mg/l
Nitrite As Nitrogen	<0.01 mg/l	Orthophosphate As Phosphorus	14 ug/l
Total Alkalinity	172 mg/l	Total Kjeldahl Nitrogen (organic A	<0.2 mg/l
Total Phosphorus Mixed Forms (po	25 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>
	Above Road Crossing	Boulder      20 %
		Gravel      30 %
		Rubble/Cobble      30 %
		Sand      20 %

**Landcover Summary - 2004 Data**

**Sample Comments**

SALAMANDER PRESENT IN SIEVE BUCKET.



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

**Station Number: S-1027**      Waterbody: Unnamed Brook (presque Isle) - Station 102      Town: Presque Isle  
**Log Number: 2731**      Subsample Factor: X1      Replicates: 3      Calculated: 12/23/2020

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
<i>Hydra</i>	02010101001	0.67	0.67		PR	2.7	2.7
<i>Leuctra</i>	09020204020	1.00	1.00	0	SH	4.1	4.1
<i>Sweltsa</i>	09020208040	0.33	0.33		PR	1.4	1.4
<i>Baetis</i>	09020401001		0.33	4	CG		1.4
<i>Baetis flavistriga</i>	09020401001004	0.33			--	1.4	
<i>Centroptilum</i>	09020401003	0.33	0.33	2	CG	1.4	1.4
<i>Paraleptophlebia</i>	09020406026	2.67	2.67	1	CG	11.0	11.0
<i>Rhyacophila</i>	09020605019		0.33	2	PR		1.4
<i>Rhyacophila fuscula</i>	09020605019060	0.33			PR	1.4	
<i>Pycnopsyche</i>	09020610049	0.33	0.33	4	SH	1.4	1.4
<i>Hesperophylax</i>	09020610054		4.00	3	SH		16.4
<i>Hesperophylax designatus</i>	09020610054110	4.00			--	16.4	
<i>Psychoglypha</i>	09020610060		9.33	0	SH		38.4
<i>Psychoglypha subborealis</i>	09020610060120	9.33			--	38.4	
Chironomidae	09021011				--		
<i>Zavrelimyia</i>	09021011022	0.33	0.33	8	PR	1.4	1.4
<i>Pseudodiamesa</i>	09021011028	0.67	0.67		CG	2.7	2.7
<i>Eukiefferiella</i>	09021011041		0.33	8	CG		1.4
<i>Eukiefferiella claripennis group</i>	09021011041075	0.33			--	1.4	
<i>Heterotrissocladius</i>	09021011044	0.33	0.33	0	CG	1.4	1.4
<i>Parametriocnemus</i>	09021011053	0.33	0.33	5	CG	1.4	1.4
<i>Rheocricotopus</i>	09021011057	0.33	0.33	6	CG	1.4	1.4
<i>Thienemanniella</i>	09021011062	0.67	0.67	6	CG	2.7	2.7
<i>Micropsectra</i>	09021011070	1.67	1.67	7	CG	6.8	6.8
Gastropoda	1001	0.33	0.33		--	1.4	1.4