



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

Station Information

Station Number: S-1029 River Basin: St. John  
Waterbody: Suitter Brook - Station 1029 HUC8 Name: Meduxnekeag  
Town: Littleton Latitude: 46° 11' 12.994" N  
Directions: 20M FROM DOWNSTREAM OF CURRIER ROAD Longitude: 67° 49' 18.889" W  
Stream Order: 2

Sample Information

Log Number: 2287 Type of Sample: ROCK BAG Date Deployed: 7/23/2014  
Subsample Factor: X1 Replicates: 3 Date Retrieved: 8/21/2014

Classification Attainment

Statutory Class: B Final Determination: A Date: 2/12/2015  
Model Result with  $P \geq 0.6$ : A Reason for Determination: Model  
Date Last Calculated: 2/11/2015 Comments:

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.85	Class A, B, or C	1.00
Class B	0.14	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	1.00	Class A	0.98
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.02

Model Variables

01 Total Mean Abundance	159.00	18 Relative Abundance Ephemeroptera	0.11
02 Generic Richness	53.00	19 EPT Generic Richness	17.00
03 Plecoptera Mean Abundance	7.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	2.74
04 Ephemeroptera Mean Abundance	17.33	23 Relative Generic Richness- Plecoptera	0.09
05 Shannon-Wiener Generic Diversity	4.57	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	24.36
06 Hilsenhoff Biotic Index	4.21	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.44	28 EP Generic Richness/14	0.86
08 Relative Generic Richness Diptera	0.42	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	0.77		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.04		
15 Perlidae Mean Abundance (Family	0.00		
Functional Group)			
16 Tanypodinae Mean Abundance	17.84		
(Family Functional Group)			
17 Chironomini Abundance (Family	3.77		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Tanytarsus</i>	14.89
2	<i>Optioservus</i>	11.11
3	<i>Molanna</i>	6.71
4	<i>Stempellinella</i>	6.69
5	<i>Promoresia</i>	6.29



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

<b>Station Number: S-1029</b>	Town: Littleton	Date Deployed: 7/23/2014
<b>Log Number: 2287</b>	Waterbody: Suitter Brook - Station 1029	Date Retrieved: 8/21/2014

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature:	19.5 deg C
Dissolved Oxygen:	8.2 mg/l
Specific Conductance:	376 uS/cm
Velocity:	12 cm/s
pH:	8.25
Wetted Width:	2.7 m
Bankfull Width:	4.3 m
Depth:	50 cm

**Waterbody Information - Retrieval**

Temperature:	15.9 deg C
Dissolved Oxygen:	9.18 mg/l
Specific Conductance:	415 uS/cm
Velocity:	15 cm/s
pH:	7.55
Wetted Width:	2.9 m
Bankfull Width:	4.3 m
Depth:	45 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Cultivated	Partly Open	Rolling
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Agricultural Runoff	Below Road Crossing	Boulder 3 %
		Gravel 22 %
		Rubble/Cobble 10 %
		Sand 60 %
		Silt 5 %

**Landcover Summary - 2004 Data**

**Sample Comments**

8/22 - NMRO METER USED FOR DO AND SPC READINGS.

7/23 - WALKING STIRS UP LOTS OF SEDIMENT.



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

**Station Number: S-1029**

Waterbody: Suitter Brook - Station 1029

Town: Littleton

**Log Number: 2287**

Subsample Factor: X1

Replicates: 3

Calculated: 2/11/2015

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Stylodrilus</i>	08020101004		5.33		--		3.4
<i>Stylodrilus heringianus</i>	08020101004001	5.33			--	3.4	
Lumbricidae	08020205	0.67	0.67		--	0.4	0.4
<i>Glossiphonia</i>	08030101004		0.33		--		0.2
<i>Glossiphonia elegans</i>	08030101004001	0.33			--	0.2	
<i>Placobdella</i>	08030101006		0.33		--		0.2
<i>Placobdella papillifera</i>	08030101006003	0.33			--	0.2	
<i>Nemoura</i>	09020201002		0.33	1	SH		0.2
<i>Nemoura trispinosa</i>	09020201002004	0.33		1	--	0.2	
<i>Paracapnia</i>	09020203018	0.67	0.67	1	SH	0.4	0.4
<i>Leuctra</i>	09020204020	5.00	5.67	0	SH	3.1	3.6
<i>Leuctra ferruginea</i>	09020204020050	0.67			--	0.4	
Perlodidae	09020207	0.33	0.33		--	0.2	0.2
<i>Isoperla</i>	09020207026	0.33	0.33	2	PR	0.2	0.2
<i>Boyeria</i>	09020301004	0.33	0.33	2	PR	0.2	0.2
<i>Cordulegaster</i>	09020303019	0.33	0.33	3	PR	0.2	0.2
Calopterygidae	09020307	0.33	0.33		--	0.2	0.2
Baetidae	09020401	0.33			--	0.2	
<i>Baetis</i>	09020401001		7.99	4	CG		5.0
<i>Baetis tricaudatus</i>	09020401001012	7.67			--	4.8	
<i>Procloeon</i>	09020401010	0.33	0.35		CG	0.2	0.2
<i>Heptagenia</i>	09020402010	0.33	0.33	2	SC	0.2	0.2
Leptophlebiidae	09020406	3.33	3.33		--	2.1	2.1
<i>Paraleptophlebia</i>	09020406026	0.67	0.67	1	CG	0.4	0.4
Ephemerellidae	09020410	0.33			--	0.2	
<i>Ephemerella</i>	09020410035	0.67	0.72	1	CG	0.4	0.5
<i>Eurylophella</i>	09020410036	3.67	3.95	3	CG	2.3	2.5
<i>Polycentropus</i>	09020603010	1.33	1.33	6	PR	0.8	0.8
<i>Rhyacophila</i>	09020605019	4.00	4.33	2	PR	2.5	2.7
<i>Rhyacophila fuscula</i>	09020605019060	0.33			PR	0.2	
<i>Oligostomis</i>	09020608039	0.67	0.67	2	PR	0.4	0.4
<i>Lepidostoma</i>	09020611064	1.67	1.67	1	SH	1.0	1.0
<i>Molanna</i>	09020615069	1.67	10.67	6	SC	1.0	6.7
<i>Molanna blenda</i>	09020615069133	9.00			--	5.7	
<i>Sialis</i>	09020702004	2.33	2.33	4	PR	1.5	1.5
<i>Tipula</i>	09021001002	0.33	0.33	4	SH	0.2	0.2
<i>Probezzia</i>	09021010041	0.33	0.33	6	PR	0.2	0.2
Chironomidae	09021011	2.00			--	1.3	



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

<b>Station Number: S-1029</b>	Waterbody: Suitter Brook - Station 1029	Town: Littleton
<b>Log Number: 2287</b>	Subsample Factor: X1	Replicates: 3
		Calculated: 2/11/2015

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Natarsia</i>	09021011011		0.34	8	PR		0.2
<i>Natarsia baltimorea</i>	09021011011026	0.33			--	0.2	
<i>Nilotanyus</i>	09021011012		1.03	6	PR		0.6
<i>Nilotanyus fimbriatus</i>	09021011012027	1.00			--	0.6	
<i>Paramerina</i>	09021011013	9.00	9.26		--	5.7	5.8
<i>Procladius</i>	09021011015	0.33	0.34	9	PR	0.2	0.2
<i>Trissopelopia</i>	09021011021		5.83		PR		3.7
<i>Trissopelopia ogemawi</i>	09021011021042	5.67			--	3.6	
<i>Zavrelimyia</i>	09021011022		1.03	8	PR		0.6
<i>Zavrelimyia thryptica group</i>	09021011022045	1.00			PR	0.6	
<i>Cricotopus</i>	09021011037		0.69	7	SH		0.4
<i>Cricotopus vierriensis</i>	09021011037071	0.33			--	0.2	
<i>Cricotopus annulator complex</i>	09021011037074	0.33			--	0.2	
<i>Parakiefferiella</i>	09021011052	0.67	0.69		CG	0.4	0.4
<i>Parametriocnemus</i>	09021011053	6.67	7.89	5	CG	4.2	5.0
<i>Parametriocnemus sp. F Epler</i>	09021011053101	1.00			--	0.6	
<i>Rheocricotopus</i>	09021011057		0.69	6	CG		0.4
<i>Rheocricotopus robacki</i>	09021011057105	0.67			--	0.4	
<i>Synorthocladius</i>	09021011061	1.00	1.03	2	CG	0.6	0.6
<i>Thienemanniella</i>	09021011062	0.33	1.03	6	CG	0.2	0.6
<i>Thienemanniella xena</i>	09021011062110	0.67			--	0.4	
<i>Micropsectra</i>	09021011070	2.67	2.74	7	CG	1.7	1.7
<i>Stempellinella</i>	09021011074		10.63	2	--		6.7
<i>Stempellinella leptocelloides</i>	09021011074001	3.67			--	2.3	
<i>Stempellinella fimbriata</i>	09021011074002	6.67			--	4.2	
<i>Tanytarsus</i>	09021011076	21.67	23.67	6	CF	13.6	14.9
<i>Tanytarsus buckleyi</i>	09021011076139	0.33			CF	0.2	
<i>Tanytarsus sepp</i>	09021011076141	1.00			--	0.6	
<i>Cryptochironomus</i>	09021011082	0.33	0.34	8	PR	0.2	0.2
<i>Cryptotendipes</i>	09021011083			6	--		
<i>Microtendipes</i>	09021011094		1.03	6	CF		0.6
<i>Microtendipes pedellus group</i>	09021011094166	1.00			--	0.6	
<i>Paracladopelma undine</i>	09021011098177				--		
<i>Polypedilum</i>	09021011102	0.33	2.40	6	SH	0.2	1.5
<i>Polypedilum illinoense group</i>	09021011102185	0.33			--	0.2	
<i>Polypedilum albicorne</i>	09021011102195	1.67			--	1.0	
<i>Simulium</i>	09021012047		1.67	4	CF		1.0
<i>Simulium vittatum</i>	09021012047064	0.33			--	0.2	



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

<b>Station Number: S-1029</b>	Waterbody: Suitter Brook - Station 1029	Town: Littleton
<b>Log Number: 2287</b>	Subsample Factor: X1	Replicates: 3
		Calculated: 2/11/2015

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Simulium tuberosum</i>	09021012047067	0.67			--	0.4	
<i>Simulium jenningsi species group</i>	09021012047070	0.33			CF	0.2	
<i>Simulium venustum/verecundum</i> <i>complex</i>	09021012047072	0.33			CF	0.2	
<i>Roederiodes</i>	09021016058	0.33	0.33	3	PR	0.2	0.2
<i>Neoporus</i>	09021103033	0.33	0.33		--	0.2	0.2
<i>Dubiraphia</i>	09021113064	3.33	3.67	6	--	2.1	2.3
<i>Dubiraphia quadrinotata</i>	09021113064037	0.33			--	0.2	
<i>Optioservus</i>	09021113067	17.67	17.67	3	SC	11.1	11.1
<i>Promoresia</i>	09021113069		10.00		--		6.3
<i>Promoresia tardella</i>	09021113069052	10.00			--	6.3	
<i>Physa</i>	10010202027	0.33	0.33		SC	0.2	0.2
Sphaeriidae	10020201	0.33	0.33		CF	0.2	0.2