



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

Station Information

**Station Number: S-924**  
Waterbody: Everett Brook - Station 924  
Town: Fort Fairfield  
Directions: DOWNSTREAM OF CURRIER RD

DEP Drainage: St. John  
HUC8: 01010004  
HUC8 Name: Aroostook River  
Latitude: 46 46 9.75 N  
Longitude: 67 51 25.18 W  
Stream Order: 2

Sample Information

**Log Number: 1872**  
Subsample Factor: X4

Type of Sample: ROCK BAG  
Replicates: 3

Date Deployed: 7/23/2009  
Date Retrieved: 8/20/2009

Classification Attainment

**Statutory Class: B**  
Model Result with P>.6: B  
Date Last Calculated: 5/6/2010

**Final Determination: B**  
**Reason for Determination: Model**  
Comments:

Date: 5/7/2010

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.10	Class A, B, or C	1.00
Class B	0.82	Non-Attainment	0.00

  

B or Better Model		A Model	
Class A or B	0.98	Class A	0.02
Class C or Non-Attainment	0.02	Class B or C or Non-Attainment	0.98

Model Variables

01 Total Mean Abundance	1573.33	18 Relative Abundance Ephemeroptera	0.12
02 Generic Richness	49.00	19 EPT Generic Richness	19.00
03 Plecoptera Mean Abundance	10.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	32.57
04 Ephemeroptera Mean Abundance	194.67	23 Relative Generic Richness- Plecoptera	0.10
05 Shannon-Wiener Generic Diversity	2.63	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	39.99
06 Hilsenhoff Biotic Index	5.36	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	73.14
07 Relative Abundance - Chironomidae	0.68	28 EP Generic Richness/14	0.86
08 Relative Generic Richness Diptera	0.43	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	97.36		
11 <i>Cheumatopsyche</i> Abundance	38.64		
12 EPT Generic Richness/ Diptera Generic Richness	0.90		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	1.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	1.36		
17 Chironomini Abundance (Family Functional Group)	33.92		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Rheotanytarsus</i>	60.37
2	<i>Hydropsyche</i>	6.19
3	Leptophlebiidae	5.00
4	<i>Hemerodromia</i>	4.83
5	<i>Maccaffertium</i>	4.65



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Waterbody: Everett Brook - Station 924

Date Retrieved: 8/20/2009

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature: 15.7 deg C  
Dissolved Oxygen: 6.7 mg/l  
Specific Conductance: 419 uS/cm  
Velocity: 26 cm/s  
pH: 6.96  
Wetted Width: 2.9 m  
Bankfull Width: 3.5 m  
Depth: 52 cm

**Waterbody Information - Retrieval**

Temperature: 19.5 deg C  
Dissolved Oxygen: 5.8 mg/l  
Specific Conductance: 467 uS/cm  
Velocity: 8 cm/s  
pH: 7.56  
Wetted Width: 2.6 m  
Bankfull Width: 2.6 m  
Depth: 43 cm

**Water Chemistry - 7/23/2009**

Soluble Reactive Phosphorus	18 ug/l	Nitrate+nitrite As N	0.56 mg/l
Total Phosphorus	0.07 mg/l	Total Kjeldahl Nitrogen	0.4 mg/l
Dissolved Organic Carbon	3.3 mg/l	Total Alkalinity	193 mg/l

**Summary of Habitat Characteristics**

Landuse Name

Canopy Cover

Terrain

Cultivated

Partly Open

Rolling

Pasture

Swamp Hardwood

Potential Stressor

Location

Substrate

Agricultural Runoff

Below Agriculture NPS

Boulder	25 %
Gravel	30 %
Rubble/Cobble	30 %
Sand	15 %

**Landcover Summary - 2004 Data**

**Sample Comments**

WETLAND UPSTREAM.



**Maine Department of Environmental Protection**  
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**Aquatic Life Taxonomic Inventory Report**

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Waterbody: Everett Brook - Station 924

Town: Fort Fairfield

**Log Number: 1872**

Subsample Factor: X4

Replicates: 3

Calculated: 5/6/2010

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Hydra</i>	02010101001	1.33	1.33		PR	0.1	0.1
<i>Turbellaria</i>	0301	1.33	1.33		--	0.1	0.1
<i>Dero</i>	08020202007	1.33	1.33		CG	0.1	0.1
<i>Nais</i>	08020202009		2.67		CG		0.2
<i>Nais communis</i>	08020202009005	2.67			--	0.2	
<i>Placobdella</i>	08030101006		2.67		--		0.2
<i>Placobdella papillifera</i>	08030101006003	2.67			--	0.2	
<i>Leuctra</i>	09020204020	4.00	4.00	0	SH	0.3	0.3
<i>Perlodidae</i>	09020207	2.67	2.67		--	0.2	0.2
<i>Isoperla</i>	09020207026	1.33	1.33	2	PR	0.1	0.1
<i>Sweltsa</i>	09020208040	1.33	1.33		PR	0.1	0.1
<i>Agnatina</i>	09020209050		1.33	2	PR		0.1
<i>Agnatina capitata</i>	09020209050152	1.33		2	PR	0.1	
<i>Baetis</i>	09020401001		6.67	4	CG		0.4
<i>Baetis tricaudatus</i>	09020401001012	6.67			--	0.4	
<i>Diphetor</i>	09020401013		1.33		--		0.1
<i>Diphetor hageni</i>	09020401013001	1.33			--	0.1	
<i>Heptageniidae</i>	09020402	12.00			--	0.8	
<i>Stenacron</i>	09020402014	20.00	22.86	7	SC	1.3	1.5
<i>Maccaffertium</i>	09020402015	37.33	73.14	4	SC	2.4	4.6
<i>Maccaffertium luteum</i>	09020402015049	25.33			--	1.6	
<i>Maccaffertium mediopunctatum</i>	09020402015050	1.33			--	0.1	
<i>Leptophlebiidae</i>	09020406	78.67	78.67		--	5.0	5.0
<i>Paraleptophlebia</i>	09020406026	4.00	4.00	1	CG	0.3	0.3
<i>Ephemerella</i>	09020410035	8.00	8.00	1	CG	0.5	0.5
<i>Lype</i>	09020602004		2.67	2	SC		0.2
<i>Lype diversa</i>	09020602004005	2.67			--	0.2	
<i>Polycentropus</i>	09020603010	6.67	6.67	6	PR	0.4	0.4
<i>Hydropsychidae</i>	09020604	18.67			--	1.2	
<i>Cheumatopsyche</i>	09020604015	33.33	38.64	5	CF	2.1	2.5
<i>Hydropsyche</i>	09020604016	28.00	97.36	4	CF	1.8	6.2
<i>Hydropsyche morosa</i>	09020604016030	1.33			--	0.1	
<i>Hydropsyche slossonae</i>	09020604016031	20.00			--	1.3	
<i>Hydropsyche sparna</i>	09020604016032	2.67			--	0.2	
<i>Hydropsyche depravata complex</i>	09020604016041	32.00			CF	2.0	
<i>Rhyacophila</i>	09020605019	2.67	4.00	2	PR	0.2	0.3
<i>Rhyacophila fuscica</i>	09020605019060	1.33			PR	0.1	
<i>Hydroptila</i>	09020607026	1.33	1.33	6	P	0.1	0.1



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		Actual	Adjusted			Actual	Adjusted
<i>Lepidostoma</i>	09020611064	8.00	8.00	1	SH	0.5	0.5
<i>Sialis</i>	09020702004	1.33	1.33	4	PR	0.1	0.1
<i>Tipula</i>	09021001002	1.33	1.33	4	SH	0.1	0.1
<i>Antocha</i>	09021001004	1.33	1.33	3	CG	0.1	0.1
<i>Dicranota</i>	09021001005	4.00	4.00	3	PR	0.3	0.3
Chironomidae	09021011	18.67			--	1.2	
<i>Meropelopia</i>	09021011010	1.33	1.36		--	0.1	0.1
<i>Pagastia</i>	09021011025		2.71	1	--		0.2
<i>Pagastia orthogonia</i>	09021011025001	2.67			--	0.2	
<i>Brillia</i>	09021011033	2.67	2.71	5	SH	0.2	0.2
<i>Diplocladius</i>	09021011038		1.36	8	CG		0.1
<i>Diplocladius cultriger</i>	09021011038001	1.33			--	0.1	
<i>Parametriocnemus</i>	09021011053	16.00	16.28	5	CG	1.0	1.0
<i>Thienemanniella</i>	09021011062	1.33	1.36	6	CG	0.1	0.1
<i>Tvetenia</i>	09021011065		17.64	5	CG		1.1
<i>Tvetenia paucunca</i>	09021011065114	17.33			--	1.1	
<i>Micropsectra</i>	09021011070	32.00	32.57	7	CG	2.0	2.1
<i>Rheotanytarsus</i>	09021011072	933.33	949.83	6	CF	59.3	60.4
<i>Stempellinella</i>	09021011074		13.57	2	--		0.9
<i>Stempellinella fimbriata</i>	09021011074002	13.33			--	0.8	
<i>Tanytarsus</i>	09021011076	1.33	1.36	6	CF	0.1	0.1
<i>Microtendipes</i>	09021011094		28.49	6	CF		1.8
<i>Microtendipes pedellus group</i>	09021011094166	28.00			--	1.8	
<i>Phaenopsectra</i>	09021011101		1.36	7	SC		0.1
<i>Phaenopsectra flavipes</i>	09021011101179	1.33			SC	0.1	
<i>Polypedilum</i>	09021011102		4.07	6	SH		0.3
<i>Polypedilum aviceps</i>	09021011102181	4.00			--	0.3	
<i>Simulium</i>	09021012047		4.00	4	CF		0.3
<i>Simulium vittatum</i>	09021012047064	4.00			--	0.3	
<i>Atherix</i>	09021015055	2.67	2.67	2	PR	0.2	0.2
Empididae	09021016			6	--		
<i>Hemerodromia</i>	09021016057	76.00	76.00	3	PR	4.8	4.8
<i>Neoplasta</i>	09021016064	5.33	5.33		PR	0.3	0.3
<i>Dubiraphia</i>	09021113064	2.67	2.67	6	--	0.2	0.2
<i>Optioservus</i>	09021113067	25.33	25.33	3	SC	1.6	1.6
<i>Sperchonopsis</i>	09030107002	1.33	1.33		--	0.1	0.1