



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

Station Information

Station Number: S-922 River Basin: St. John
Waterbody: North Fork Mclean Brook - Station 922 HUC8 Name: Fish
Town: St Agatha Latitude: 47 13 1.06 N
Directions: ~20 M DOWNSTREAM OF PLEINE RD Longitude: 68 19 43.55 W
Stream Order: 2

Sample Information

Log Number: 2269 Type of Sample: ROCK BAG Date Deployed: 7/21/2014
Subsample Factor: X4 Replicates: 3 Date Retrieved: 8/18/2014

Classification Attainment

Statutory Class: B **Final Determination:** B Date: 1/22/2015
Model Result with $P \geq 0.6$: B **Reason for Determination:** Model
Date Last Calculated: 1/22/2015 **Comments:** Low Class B (.71)

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.30	Class A, B, or C	1.00
Class B	0.59	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	0.71	Class A	0.04
Class C or Non-Attainment	0.29	Class B or C or Non-Attainment	0.96

Model Variables

01 Total Mean Abundance	634.67	18 Relative Abundance Ephemeroptera	0.12
02 Generic Richness	45.00	19 EPT Generic Richness	9.00
03 Plecoptera Mean Abundance	2.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	65.96
04 Ephemeroptera Mean Abundance	74.67	23 Relative Generic Richness- Plecoptera	0.02
05 Shannon-Wiener Generic Diversity	4.25	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	30.96
06 Hilsenhoff Biotic Index	4.69	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.67	28 EP Generic Richness/14	0.36
08 Relative Generic Richness Diptera	0.64	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	58.67		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	0.31		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Parametriocnemus</i>	17.82
2	<i>Micropsectra</i>	10.39
3	<i>Baetis</i>	10.29
4	<i>Hydropsyche</i>	9.24
5	<i>Stempellinella</i>	6.36

13 Relative Abundance - Oligochaeta	0.06
15 Perlidae Mean Abundance (Family Functional Group)	0.00
16 Tanypodinae Mean Abundance (Family Functional Group)	5.38
17 Chironomini Abundance (Family Functional Group)	18.85



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Town: St Agatha

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Waterbody: North Fork Mclean Brook - Station 922

Date Retrieved: 8/18/2014

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 15.2 deg C
Dissolved Oxygen: 8.4 mg/l
Specific Conductance: 250 uS/cm
Velocity: 28 cm/s
pH: 7.2
Wetted Width: 1.8 m
Bankfull Width: 5.1 m
Depth: 20 cm

Waterbody Information - Retrieval

Temperature: 13.9 deg C
Dissolved Oxygen: 9.54 mg/l
Specific Conductance: 261 uS/cm
Velocity: 22 cm/s
pH: 7.18
Wetted Width: 1.3 m
Bankfull Width: 5.1 m
Depth: 18 cm

Water Chemistry - 7/9/2014

Nitrate+nitrite As N 5.9 mg/l
Total Kjeldahl Nitrogen 0.5 mg/l
Total Alkalinity 54 mg/l

Total Phosphorus 28 ug/l
Orthophosphate As Phosphorus 14 ug/l

Summary of Habitat Characteristics

Landuse Name

Cultivated

Canopy Cover

Open

Terrain

Rolling

Potential Stressor

Agricultural Runoff

Location

Below Road Crossing

Substrate

Gravel 20 %
Rubble/Cobble 10 %
Sand 50 %
Silt 20 %

Landcover Summary - 2004 Data

Sample Comments

8/18 - LOTS OF LEECHES. NMRO METER USED FOR DO, TEMP AND SPC.

7/21 - SAND AND SILT VARS THROUGHOUT THE STREAM SYSTEM.



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Station Number: S-922

Waterbody: North Fork Mclean Brook - Station 922

Town: St Agatha

Log Number: 2269

Subsample Factor: X4

Replicates: 3

Calculated: 1/22/2015

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Stylodrilus</i>	08020101004		37.33		--		5.9
<i>Stylodrilus heringianus</i>	08020101004001	37.33			--	5.9	
Tubificida	080202	2.67	2.67		--	0.4	0.4
<i>Glossiphonia</i>	08030101004		1.33		--		0.2
<i>Glossiphonia elegans</i>	08030101004001	1.33			--	0.2	
<i>Haemopis</i>	08030202001		1.33		--		0.2
<i>Haemopis marmorata</i>	08030202001002	1.33			--	0.2	
<i>Erpobdella</i>	08030203002		4.00		--		0.6
<i>Erpobdella melanostoma</i>	08030203002003	2.67			--	0.4	
<i>Erpobdella obscura</i>	08030203002006	1.33			--	0.2	
<i>Leuctra</i>	09020204020	2.67	2.67	0	SH	0.4	0.4
Baetidae	09020401	1.33	1.33		--	0.2	0.2
<i>Baetis</i>	09020401001	4.00	65.33	4	CG	0.6	10.3
<i>Baetis tricaudatus</i>	09020401001012	61.33			--	9.7	
Heptageniidae	09020402	1.33	1.33		--	0.2	0.2
Leptophlebiidae	09020406	6.67	6.67		--	1.1	1.1
Hydropsychidae	09020604	2.67	2.67		--	0.4	0.4
<i>Hydropsyche</i>	09020604016	58.67	58.67	4	CF	9.2	9.2
Limnephilidae	09020610	4.00	4.00		--	0.6	0.6
<i>Psychoglypha</i>	09020610060		4.00	0	SH		0.6
<i>Psychoglypha subborealis</i>	09020610060120	4.00			--	0.6	
Lepidoptera	090209	2.67	2.67		--	0.4	0.4
<i>Tipula</i>	09021001002	1.33	1.33	4	SH	0.2	0.2
<i>Dicranota</i>	09021001005	2.67	2.67	3	PR	0.4	0.4
<i>Atrichopogon</i>	09021010034				CG		
Chironomidae	09021011	4.00			--	0.6	
<i>Paramerina</i>	09021011013	5.33	5.38		--	0.8	0.8
<i>Pagastia</i>	09021011025		1.35	1	--		0.2
<i>Pagastia orthogonia</i>	09021011025001	1.33			--	0.2	
<i>Prodiamesa</i>	09021011031		10.77	3	CG		1.7
<i>Prodiamesa olivacea</i>	09021011031048	10.67			--	1.7	
<i>Brillia</i>	09021011033		2.69	5	SH		0.4
<i>Brillia parva</i>	09021011033050	2.67			--	0.4	
<i>Corynoneura</i>	09021011036	1.33	1.35	7	CG	0.2	0.2
<i>Cricotopus</i>	09021011037		24.23	7	SH		3.8
<i>Cricotopus bicinctus</i>	09021011037057	13.33			--	2.1	
<i>Cricotopus vierriensis</i>	09021011037071	5.33			--	0.8	
<i>Cricotopus patens</i>	09021011037075	2.67			--	0.4	



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		Actual	Adjusted			Actual	Adjusted
<i>Cricotopus triannulatus/infuscatus</i>	09021011037078	2.67			SH	0.4	
<i>Diplocladius</i>	09021011038		1.35	8	CG		0.2
<i>Diplocladius cultriger</i>	09021011038001	1.33			--	0.2	
<i>Eukiefferiella</i>	09021011041		6.73	8	CG		1.1
<i>Eukiefferiella claripennis group</i>	09021011041075	6.67			--	1.1	
<i>Heterotrissocladius</i>	09021011044		37.69	0	CG		5.9
<i>Heterotrissocladius marcidus</i>	09021011044083	37.33			--	5.9	
<i>Nanocladius</i>	09021011049		5.38	3	CG		0.8
<i>Nanocladius spiniplenus</i>	09021011049090	5.33			--	0.8	
<i>Parakiefferiella</i>	09021011052	2.67	9.42		CG	0.4	1.5
<i>Parakiefferiella coronata</i>	09021011052002	6.67			--	1.1	
<i>Parametriocnemus</i>	09021011053	22.67	113.07	5	CG	3.6	17.8
<i>Parametriocnemus sp. F Epler</i>	09021011053101	89.33			--	14.1	
<i>Paraphaenocladius</i>	09021011054	1.33	1.35	4	CG	0.2	0.2
<i>Psectrocladius</i>	09021011056		33.65	8	CG		5.3
<i>Psectrocladius flavus</i>	09021011056109	33.33			--	5.3	
<i>Rheocricotopus</i>	09021011057		2.69	6	CG		0.4
<i>Rheocricotopus pauciseta</i>	09021011057111	2.67			--	0.4	
<i>Synorthocladius</i>	09021011061	1.33	1.35	2	CG	0.2	0.2
<i>Thienemanniella</i>	09021011062	9.33	12.11	6	CG	1.5	1.9
<i>Thienemanniella xena</i>	09021011062110	2.67			--	0.4	
<i>Tvetenia</i>	09021011065		16.15	5	CG		2.5
<i>Tvetenia paucunca</i>	09021011065114	16.00			--	2.5	
<i>Micropsectra</i>	09021011070	65.33	65.96	7	CG	10.3	10.4
<i>Stempellinella</i>	09021011074		40.38	2	--		6.4
<i>Stempellinella leptocelloides</i>	09021011074001	38.67			--	6.1	
<i>Stempellinella fimbriata</i>	09021011074002	1.33			--	0.2	
<i>Tanytarsus</i>	09021011076	6.67	6.73	6	CF	1.1	1.1
<i>Harnischia</i>	09021011090	2.67	2.69	8	CG	0.4	0.4
<i>Paracladopelma</i>	09021011098		2.69	7	--		0.4
<i>Paracladopelma undine</i>	09021011098177	2.67			--	0.4	
<i>Polypedilum</i>	09021011102		13.46	6	SH		2.1
<i>Polypedilum aviceps</i>	09021011102181	4.00			--	0.6	
<i>Polypedilum albicorne</i>	09021011102195	9.33			--	1.5	
<i>Brundiniella</i>	09021011115		2.69		--		0.4
<i>Brundiniella eumorpha</i>	09021011115001	2.67			--	0.4	
<i>Heleniella</i>	09021011126	1.33	1.35		--	0.2	0.2
<i>Simulium</i>	09021012047		10.67	4	CF		1.7



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<i>Simulium vittatum</i>	09021012047064	2.67			--	0.4	
<i>Simulium tuberosum</i>	09021012047067	6.67			--	1.1	
<i>Simulium venustum/verecundum</i> <i>complex</i>	09021012047072	1.33			CF	0.2	
<i>Pisidium</i>	10020201002	1.33	1.33		CF	0.2	0.2