



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

Station Information

Station Number: S-922	DEP Drainage: St. John
Waterbody: North Fork Mclean Brook - Station 922	HUC8: 01010003
Town: St Agatha	HUC8 Name: Fish River
Directions: ~20 M DOWNSTREAM OF PLEINE RD	Latitude: 47 13 1.06 N
	Longitude: 68 19 43.55 W
	Stream Order: 2

Sample Information

Log Number: 1850	Type of Sample: ROCK BAG	Date Deployed: 7/21/2009
Subsample Factor: X1	Replicates: 2	Date Retrieved: 8/18/2009

Classification Attainment

Statutory Class: B	Final Determination: C	Date: 4/27/2010
Model Result with P>.6: C	Reason for Determination: Model	
Date Last Calculated: 4/27/2010	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.21	Class A, B, or C	1.00
Class B	0.39	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.08	Class A	0.02
Class C or Non-Attainment	0.92	Class B or C or Non-Attainment	0.98

Model Variables

01 Total Mean Abundance	234.00	18 Relative Abundance Ephemeroptera	0.01
02 Generic Richness	51.00	19 EPT Generic Richness	11.00
03 Plecoptera Mean Abundance	0.50	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	4.00
04 Ephemeroptera Mean Abundance	2.00	23 Relative Generic Richness- Plecoptera	0.02
05 Shannon-Wiener Generic Diversity	4.71	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	34.50
06 Hilsenhoff Biotic Index	5.56	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	0.29
08 Relative Generic Richness Diptera	0.55	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	12.00		
11 <i>Cheumatopsyche</i> Abundance	0.50		
12 EPT Generic Richness/ Diptera	0.39		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.10		
15 Perlidae Mean Abundance	0.00		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	7.00		
(Family Functional Group)			
17 Chironomini Abundance (Family	12.00		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Parametriocnemus</i>	14.74
2	<i>Cricotopus</i>	10.90
3	<i>Diplocladius</i>	5.98
4	<i>Paratanytarsus</i>	5.77
5	<i>Hydropsyche</i>	5.13



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Town: St Agatha

Date Deployed: 7/21/2009

**Log Number: 1850**

Waterbody: North Fork Mclean Brook - Station 922

Date Retrieved: 8/18/2009

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature: 16.3 deg C  
Dissolved Oxygen: 7.7 mg/l  
Specific Conductance: 197 uS/cm  
Velocity: 50 cm/s  
pH: 7.35  
Wetted Width: 3.1 m  
Bankfull Width: 3.7 m  
Depth: 41 cm

**Waterbody Information - Retrieval**

Temperature: 18.3 deg C  
Dissolved Oxygen: 7 mg/l  
Specific Conductance: 239 uS/cm  
Velocity: 11 cm/s  
pH: 7.29  
Wetted Width: 2.7 m  
Bankfull Width: 5.1 m  
Depth: 35 cm

**Water Chemistry - 7/21/2009**

Soluble Reactive Phosphorus	12 ug/l	Nitrate+nitrite As N	1.6 mg/l
Total Phosphorus	0.042 mg/l	Total Kjeldahl Nitrogen	0.3 mg/l
Dissolved Organic Carbon	3.3 mg/l	Total Alkalinity	63 mg/l

**Summary of Habitat Characteristics**

Landuse Name

Cultivated

Pasture

Upland Hardwood

Potential Stressor

Agricultural Runoff

Sedimentation

Canopy Cover

Dense

Location

Below Agriculture NPS

Below Road Crossing

Terrain

Rolling

Substrate

Gravel 40 %

Rubble/Cobble 20 %

Sand 20 %

Silt 20 %

**Landcover Summary - 2004 Data**

**Sample Comments**

LOTS OF SEDIMENT.



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**Aquatic Life Taxonomic Inventory Report**

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<b>Log Number: 1850</b>	Subsample Factor: X1	Replicates: 2
		Calculated: 4/27/2010

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Stylodrilus</i>	08020101004		11.00		--		4.7
<i>Stylodrilus heringianus</i>	08020101004001	11.00			--	4.7	
Enchytraeidae	08020201	0.50	0.50		--	0.2	0.2
Naididae	08020202	9.00			--	3.8	
<i>Nais</i>	08020202009		6.90		CG		2.9
<i>Nais communis</i>	08020202009005	1.50			--	0.6	
<i>Limnodrilus</i>	08020202022		4.60		CG		2.0
<i>Limnodrilus hoffmeisteri</i>	08020202022003	1.00			--	0.4	
Lumbricidae	08020205	1.50	1.50		--	0.6	0.6
<i>Glossiphonia</i>	08030101004		0.50		--		0.2
<i>Glossiphonia complanata</i>	08030101004001	0.50			--	0.2	
<i>Haemopis</i>	08030201001		9.50		--		4.1
<i>Haemopis grandis</i>	08030201001001	9.50			--	4.1	
<i>Nephelopsis</i>	08030301004		8.50		--		3.6
<i>Nephelopsis obscura</i>	08030301004001	8.50			--	3.6	
<i>Leuctra</i>	09020204020	0.50	0.50	0	SH	0.2	0.2
<i>Baetis</i>	09020401001	0.50	0.50	4	CG	0.2	0.2
Heptageniidae	09020402	0.50	0.50		--	0.2	0.2
Leptophlebiidae	09020406	1.00	1.00		--	0.4	0.4
<i>Dolophilodes</i>	09020601001	0.50	0.50	0	CF	0.2	0.2
<i>Cheumatopsyche</i>	09020604015	0.50	0.50	5	CF	0.2	0.2
<i>Hydropsyche</i>	09020604016	1.00	12.00	4	CF	0.4	5.1
<i>Hydropsyche sparna</i>	09020604016032	11.00			--	4.7	
Phryganeidae	09020608	0.50	0.50		--	0.2	0.2
Limnephilidae	09020610	0.50	0.50		--	0.2	0.2
<i>Limnephilus</i>	09020610055	0.50	0.50	3	SH	0.2	0.2
<i>Lepidostoma</i>	09020611064	3.00	3.00	1	SH	1.3	1.3
<i>Dicranota</i>	09021001005	1.50	1.50	3	PR	0.6	0.6
<i>Dixa</i>	09021006023	1.00	1.00		CG	0.4	0.4
Ceratopogonidae	09021010	0.50	0.50		--	0.2	0.2
Chironomidae	09021011				--		
<i>Natarsia</i>	09021011011		3.00	8	PR		1.3
<i>Natarsia baltimorea</i>	09021011011026	3.00			--	1.3	
<i>Paramerina</i>	09021011013	3.50	3.50		--	1.5	1.5
<i>Zavrelimyia</i>	09021011022	0.50	0.50	8	PR	0.2	0.2
<i>Pagastia</i>	09021011025		0.50	1	--		0.2
<i>Pagastia orthogonia</i>	09021011025001	0.50			--	0.2	
<i>Prodiamesa</i>	09021011031		1.00	3	CG		0.4



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		Actual	Adjusted			Actual	Adjusted
<i>Prodiamesa olivacea</i>	09021011031048	1.00			--	0.4	
<i>Brillia</i>	09021011033		1.00	5	SH		0.4
<i>Brillia flavifrons</i>	09021011033049	1.00			--	0.4	
<i>Corynoneura</i>	09021011036	8.50	8.50	7	CG	3.6	3.6
<i>Cricotopus</i>	09021011037	1.00	25.50	7	SH	0.4	10.9
<i>Cricotopus bicinctus</i>	09021011037057	22.50			--	9.6	
<i>Cricotopus annulator complex</i>	09021011037074	2.00			--	0.9	
<i>Diplocladius</i>	09021011038		14.00	8	CG		6.0
<i>Diplocladius cultriger</i>	09021011038001	14.00			--	6.0	
<i>Doncricotopus</i>	09021011039	2.00	2.00		--	0.9	0.9
<i>Heterotrissocladius</i>	09021011044		6.00	0	CG		2.6
<i>Heterotrissocladius marcidus</i>	09021011044083	6.00			--	2.6	
<i>Parakiefferiella</i>	09021011052		2.00		CG		0.9
<i>Parakiefferiella sp. E</i>	09021011052001	2.00			--	0.9	
<i>Parametriocnemus</i>	09021011053	30.50	34.50	5	CG	13.0	14.7
<i>Parametriocnemus sp. F Epler</i>	09021011053101	4.00			--	1.7	
<i>Synorthocladius</i>	09021011061	1.00	1.00	2	CG	0.4	0.4
<i>Thienemanniella</i>	09021011062	6.00	8.00	6	CG	2.6	3.4
<i>Thienemanniella xena</i>	09021011062110	2.00			--	0.9	
<i>Tvetenia</i>	09021011065		5.50	5	CG		2.4
<i>Tvetenia paucunca</i>	09021011065114	5.50			--	2.4	
<i>Micropsectra</i>	09021011070	4.00	4.00	7	CG	1.7	1.7
<i>Paratanytarsus</i>	09021011071	13.50	13.50	6	--	5.8	5.8
<i>Stempellinella</i>	09021011074		3.00	2	--		1.3
<i>Stempellinella leptocelloides</i>	09021011074001	1.00			--	0.4	
<i>Stempellinella fimbriata</i>	09021011074002	2.00			--	0.9	
<i>Tanytarsus</i>	09021011076	8.50	8.50	6	CF	3.6	3.6
<i>Paracladopelma</i>	09021011098		4.00	7	--		1.7
<i>Paracladopelma undine</i>	09021011098177	4.00			--	1.7	
<i>Paratendipes</i>	09021011100		1.00	8	CG		0.4
<i>Paratendipes subaequalis group</i>	09021011100178	1.00			--	0.4	
<i>Polypedilum</i>	09021011102		7.00	6	SH		3.0
<i>Polypedilum aviceps</i>	09021011102181	1.00			--	0.4	
<i>Polypedilum angulum</i>	09021011102198	6.00			--	2.6	
<i>Simulium</i>	09021012047		1.00	4	CF		0.4
<i>Simulium vittatum</i>	09021012047064	0.50			--	0.2	
<i>Simulium tuberosum</i>	09021012047067	0.50			--	0.2	
<i>Neoplasta</i>	09021016064	0.50	0.50		PR	0.2	0.2



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<i>Optioservus</i>	09021113067		0.50	3	SC		0.2
<i>Optioservus fastiditus</i>	09021113067044	0.50			--	0.2	
Basommatophora	100102	0.50	0.50		--	0.2	0.2
<i>Gyraulus</i>	10010203029	0.50	0.50		SC	0.2	0.2
Sphaeriidae	10020201	3.00	3.00		CF	1.3	1.3
<i>Pisidium</i>	10020201002	4.50	4.50		CF	1.9	1.9