



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

Station Information

Station Number: S-816	DEP Drainage: Piscataqua - Presumpscot - Saco
Waterbody: Moose Brook (auburn) - Station 816	HUC8: 01060001
Town: Auburn	HUC8 Name: Presumpscot
Directions: UPSTREAM OF TURKEY ROAD #1	Latitude: 44 1 21.46 N
	Longitude: 70 16 26.53 W
	Stream Order:

Sample Information

Log Number: 1562	Type of Sample: ROCK BAG	Date Deployed: 7/17/2006
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/14/2006

Classification Attainment

Statutory Class: B	Final Determination: B	Date: 7/9/2007
Model Result with P>.6: B	Reason for Determination: Model	
Date Last Calculated: 7/3/2007	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.16	Class A, B, or C	1.00
Class B	0.58	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.69	Class A	0.01
Class C or Non-Attainment	0.31	Class B or C or Non-Attainment	0.99

Model Variables

01 Total Mean Abundance	957.33	18 Relative Abundance Ephemeroptera	0.01
02 Generic Richness	54.00	19 EPT Generic Richness	13.00
03 Plecoptera Mean Abundance	1.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	13.50	23 Relative Generic Richness- Plecoptera	0.02
05 Shannon-Wiener Generic Diversity	3.59	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	282.19
06 Hilsenhoff Biotic Index	4.93	26 Sum of Abundances: <i>Acroneuria</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.40	28 EP Generic Richness/14	0.43
08 Relative Generic Richness Diptera	0.48	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	274.81		
11 <i>Cheumatopsyche</i> Abundance	200.19		
12 EPT Generic Richness/ Diptera Generic Richness	0.50		
13 Relative Abundance - Oligochaeta	0.01		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	28.67		
17 Chironomini Abundance (Family Functional Group)	42.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	28.71
2	<i>Cheumatopsyche</i>	20.91
3	<i>Rheotanytarsus</i>	14.35
4	<i>Tanytarsus</i>	6.69
5	<i>Parametrioctenus</i>	3.48



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Town: Auburn

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Waterbody: Moose Brook (auburn) - Station 816

Date Retrieved: 8/14/2006

Sample Collection and Processing Information

Sampling Organization: DEP

Taxonomist: LOTIC

Waterbody Information - Deployment

Temperature: 23.2 deg C
 Dissolved Oxygen: 7.7 mg/l
 Specific Conductance: 312 uS/cm
 Velocity: 46 cm/s
 pH:
 Wetted Width: 2.6 m
 Bankfull Width: 2.6 m
 Depth: 30 cm

Waterbody Information - Retrieval

Temperature: 15.2 deg C
 Dissolved Oxygen: 8.2 mg/l
 Specific Conductance: 332 uS/cm
 Velocity: 34 cm/s
 pH: 7.21
 Wetted Width: 2.6 m
 Bankfull Width: 2.6 m
 Depth: 25 cm

Summary of Habitat Characteristics

Landuse Name

Canopy Cover

Terrain

Swamp Hardwood

Canopy Open

Rolling Terrain

Urban

Stressor

Location

Substrate

Below Urban NPS

Gravel 20 %
 Rubble/Cobble 40 %
 Sand 40 %

Sample Comments



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

Station Number: S-816 Waterbody: Moose Brook (auburn) - Station 816 Town: Auburn
Log Number: 1562 Subsample Factor: X1 Replicates: 3 Calculated: 7/3/2007

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Lumbriculus</i>	08020101002	1.00	1.00		CG	0.1	0.1
Naididae	08020202	5.50	5.50		--	0.6	0.6
<i>Nais</i>	08020202009	2.00	2.00		CG	0.2	0.2
<i>Limnodrilus</i>	08020203005	1.00	1.00		CG	0.1	0.1
<i>Orconectes</i>	09010301008	1.00	1.00		CG	0.1	0.1
<i>Sweltsa</i>	09020208040	1.00	1.00		PR	0.1	0.1
<i>Boyeria</i>	09020301004	2.00	2.00	2	PR	0.2	0.2
<i>Calopteryx</i>	09020307043	3.00	3.00	5	PR	0.3	0.3
Coenagrionidae	09020309	1.00	1.00		--	0.1	0.1
<i>Baetis</i>	09020401001		2.00	4	CG		0.2
<i>Baetis brunneicolor</i>	09020401001003	1.00			--	0.1	
<i>Baetis flavistriga</i>	09020401001004	1.00			--	0.1	
<i>Acerpenna</i>	09020401007		7.50	5	CG		0.8
<i>Acerpenna macdunnoughi</i>	09020401007001	7.50			--	0.8	
Leptophlebiidae	09020406	1.00	1.00		--	0.1	0.1
<i>Tricorythodes</i>	09020411038	1.00	1.00	4	CG	0.1	0.1
<i>Caenis</i>	09020412040	2.00	2.00	7	CG	0.2	0.2
<i>Chimarra</i>	09020601003	10.00	10.00	2	CF	1.0	1.0
<i>Polycentropus</i>	09020603010	5.00	5.00	6	PR	0.5	0.5
Hydropsychidae	09020604	388.00			--	40.5	
<i>Cheumatopsyche</i>	09020604015	36.67	200.19	5	CF	3.8	20.9
<i>Hydropsyche</i>	09020604016	50.33	274.81	4	CF	5.3	28.7
<i>Ochrotrichia</i>	09020607027	1.00	1.00	4	CG	0.1	0.1
<i>Hydatophylax</i>	09020610048	2.00	2.00	2	SH	0.2	0.2
<i>Oecetis</i>	09020618078	1.50	1.50	8	PR	0.2	0.2
<i>Nigronia</i>	09020701003	1.50	1.50	0	PR	0.2	0.2
<i>Sialis</i>	09020702004	1.00	1.00	4	PR	0.1	0.1
<i>Antocha</i>	09021001004	3.00	3.00	3	CG	0.3	0.3
<i>Hexatoma</i>	09021001008	3.00	3.00	2	PR	0.3	0.3
<i>Bezzia/palpomyia</i>	09021010043	2.00	2.00	6	PR	0.2	0.2
<i>Ablabesmyia</i>	09021011001	10.00	10.00	8	PR	1.0	1.0
<i>Larsia</i>	09021011009	4.00	4.00	6	PR	0.4	0.4
<i>Procladius</i>	09021011015	4.00	4.00	9	PR	0.4	0.4
<i>Thienemannimyia</i>	09021011020		10.67	3	PR		1.1
<i>Thienemannimyia/arctopelopia grou</i>	09021011020041	10.67			--	1.1	
<i>Potthastia</i>	09021011026		6.00	2	CG		0.6
<i>Potthastia longimana</i>	09021011026046	6.00			--	0.6	
<i>Brillia</i>	09021011033	8.00	8.00	5	SH	0.8	0.8
<i>Corynoneura</i>	09021011036	4.00	4.00	7	CG	0.4	0.4
<i>Cricotopus</i>	09021011037	4.00	8.00	7	SH	0.4	0.8
<i>Cricotopus bicinctus</i>	09021011037057	4.00			--	0.4	
<i>Limnophyes</i>	09021011047	4.00	4.00	8	CG	0.4	0.4



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<i>Parametriocnemus</i>	09021011053	33.33	33.33	5	CG	3.5	3.5
<i>Rheocricotopus</i>	09021011057		6.00	6	CG		0.6
<i>Rheocricotopus robacki</i>	09021011057105	6.00			--	0.6	
<i>Thienemanniella</i>	09021011062	4.00	4.00	6	CG	0.4	0.4
<i>Tvetenia</i>	09021011065	4.00	30.00	5	CG	0.4	3.1
<i>Tvetenia paucunca</i>	09021011065114	26.00			--	2.7	
<i>Rheotanytarsus</i>	09021011072	137.33	137.33	6	CF	14.3	14.3
<i>Stempellinella</i>	09021011074	4.00	4.00	2	--	0.4	0.4
<i>Tanytarsus</i>	09021011076	64.00	64.00	6	CF	6.7	6.7
<i>Microtendipes</i>	09021011094		8.00	6	CF		0.8
<i>Microtendipes rydalensis-grp.</i>	09021011094168	8.00			--	0.8	
<i>Nilothauma</i>	09021011095	8.00	8.00	2	--	0.8	0.8
<i>Polypedilum</i>	09021011102		26.67	6	SH		2.8
<i>Polypedilum aviceps</i>	09021011102181	22.67			--	2.4	
<i>Polypedilum scalaenum-grp.</i>	09021011102189	4.00			--	0.4	
<i>Simulium</i>	09021012047	2.00	2.00	4	CF	0.2	0.2
<i>Atherix</i>	09021015055	1.00	1.00	2	PR	0.1	0.1
Empididae	09021016	10.67	10.67	6	--	1.1	1.1
<i>Chelifera</i>	09021016060	1.00	1.00		PR	0.1	0.1
<i>Dubiraphia</i>	09021113064	4.00	4.00	6	CG	0.4	0.4
<i>Optioservus</i>	09021113067	1.00	1.00	3	SC	0.1	0.1
<i>Stenelmis</i>	09021113070	19.67	19.67	5	SC	2.1	2.1
<i>Lebertia</i>	09030105001	1.00	1.00		--	0.1	0.1
Ancyliidae	10010204	1.00	1.00		SC	0.1	0.1