



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

Station Information

Station Number: S-152

Waterbody: Piscataquis River - Station 152
Town: Dover-foxcroft
Directions: 1 KM BELOW DOVER - FOXCROFT POTW

River Basin: Penobscot
HUC8 Name: Piscataquis
Latitude: 45 11 8.24 N
Longitude: 69 10 4.94 W
Stream Order: 5

Sample Information

Log Number: 2258

Type of Sample: ROCK BASKET

Date Deployed: 7/10/2014

Subsample Factor: X4

Replicates: 3

Date Retrieved: 8/7/2014

Classification Attainment

Statutory Class: B

Final Determination: B

Date: 11/6/2014

Model Result with $P \geq 0.6$: B

Reason for Determination: Model

Date Last Calculated: 11/6/2014

Comments: Indeterminate for Class A.

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.33	Class C	0.05	Class A, B, or C	1.00
Class B	0.62	NA	0.00	Non-Attainment	0.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B			1.00	Class A	0.44
Class C or Non-Attainment			0.00	Class B or C or Non-Attainment	0.56

Model Variables

01 Total Mean Abundance	928.00	18 Relative Abundance Ephemeroptera	0.29
02 Generic Richness	47.00	19 EPT Generic Richness	23.00
03 Plecoptera Mean Abundance	5.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	20.37
04 Ephemeroptera Mean Abundance	265.33	23 Relative Generic Richness- Plecoptera	0.02
05 Shannon-Wiener Generic Diversity	4.44	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	115.50
06 Hilsenhoff Biotic Index	4.67	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	52.59
07 Relative Abundance - Chironomidae	0.40	28 EP Generic Richness/14	0.86
08 Relative Generic Richness Diptera	0.36	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	130.00	Five Most Dominant Taxa	
11 <i>Cheumatopsyche</i> Abundance	69.33		
12 EPT Generic Richness/ Diptera Generic Richness	1.35	Rank	Taxon Name
13 Relative Abundance - Oligochaeta	0.00		Percent
15 Perlidae Mean Abundance (Family Functional Group)	5.33	1	<i>Polypedilum</i>
16 Tanypodinae Mean Abundance (Family Functional Group)	25.80	2	<i>Hydropsyche</i>
17 Chironomini Abundance (Family Functional Group)	192.83	3	<i>Tricorythodes</i>
		4	<i>Cheumatopsyche</i>
		5	<i>Leucrocota</i>



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	25 deg C
Dissolved Oxygen:	8.9 mg/l
Specific Conductance:	44 uS/cm
Velocity:	
pH:	7.3
Wetted Width:	55 m
Bankfull Width:	55 m
Depth:	82 cm

Waterbody Information - Retrieval

Temperature:	23.9 deg C
Dissolved Oxygen:	10.5 mg/l
Specific Conductance:	61 uS/cm
Velocity:	27 cm/s
pH:	8.5
Wetted Width:	55 m
Bankfull Width:	55 m
Depth:	60 cm

Water Chemistry - 8/7/2014

Ammonia As Nitrogen	<0.01 mg/l	Nitrate+nitrite As N	0.02 mg/l
Total Phosphorus	32 ug/l	Total Kjeldahl Nitrogen	0.3 mg/l
Total Suspended Solids	<2 mg/l	Dissolved Organic Carbon	3.9 mg/l
Total Dissolved Solids	56 mg/l	Orthophosphate As Phosphorus	17 ug/l

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Open	Rolling
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nutrients	Below Point Source	Bedrock 60 %
	Main Stem	Boulder 15 %
		Rubble/Cobble 20 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	229936	High Int. Dev. %	0.2	Water %	2.1	Non-vegetated %	0.0
		Med Int. Dev. %	0.2	Wetland %	3.3	Tilled Agriculture %	1.8
		Low Int. Dev. %	3.5	Upland Woody %	87.4	Grassland %	1.3
		Development %	3.9	Natural %	90.7	Human Altered %	7.2
						Impervious %	1.3

Sample Comments

8/7/14 - LONG STRANDS OF FILAMENTOUS ALGAE ALONG THE BANKS.

7/10/14 - FISH, FROGS, DRAGONFLIES PRESENT. QUESTIONABLE VELOCITY METER READING.



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Aquatic Life Taxonomic Inventory Report**

Station Number: S-152

Waterbody: Piscataquis River - Station 152

Town: Dover-foxcroft

Log Number: 2258

Subsample Factor: X4

Replicates: 3

Calculated: 11/6/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Acroneuria</i>	09020209042		5.33	0	PR		0.6
<i>Acroneuria lycorias</i>	09020209042125	5.33			--	0.6	
<i>Neurocordulia</i>	09020305026		2.67	2	PR		0.3
<i>Neurocordulia michaeli</i>	09020305026054	2.67			--	0.3	
<i>Hetaerina</i>	09020307044		1.33	6	PR		0.1
<i>Hetaerina americana</i>	09020307044001	1.33			--	0.1	
<i>Argia</i>	09020309048	1.33	1.33	7	PR	0.1	0.1
Baetidae	09020401	2.67			--	0.3	
<i>Baetis</i>	09020401001		8.46	4	CG		0.9
<i>Baetis intercalaris</i>	09020401001008	8.00			--	0.9	
<i>Acerpenna</i>	09020401007	10.67	26.78	5	CG	1.1	2.9
<i>Acerpenna pygmaea</i>	09020401007011	14.67			--	1.6	
<i>Plauditus</i>	09020401012	13.33	14.10		CG	1.4	1.5
Heptageniidae	09020402	1.33			--	0.1	
<i>Epeorus</i>	09020402009	1.33	1.35	0	SC	0.1	0.1
<i>Leucrocuta</i>	09020402011	57.33	58.06	1	SC	6.2	6.3
<i>Maccaffertium</i>	09020402015	40.00	47.26	4	SC	4.3	5.1
<i>Maccaffertium luteum</i>	09020402015049	2.67			--	0.3	
<i>Maccaffertium mediopunctatum</i>	09020402015050	4.00			--	0.4	
<i>Isonychia</i>	09020404018	25.33	25.33	2	CF	2.7	2.7
Leptophlebiidae	09020406	1.33	1.33		--	0.1	0.1
Ephemerellidae	09020410	2.67			--	0.3	
<i>Ephemerella</i>	09020410035	8.00	10.29	1	CG	0.9	1.1
<i>Serratella</i>	09020410037		1.71	2	CG		0.2
<i>Serratella (Teloganopsis) deficiens</i>	09020410037121	1.33			--	0.1	
<i>Tricorythodes</i>	09020411038	70.67	70.67	4	CG	7.6	7.6
<i>Chimarra</i>	09020601003	1.33	4.00	2	CF	0.1	0.4
<i>Chimarra socia</i>	09020601003004	2.67			--	0.3	
Polycentropodidae	09020603	5.33			--	0.6	
<i>Cernotina</i>	09020603006	5.33	6.30		PR	0.6	0.7
<i>Neureclipsis</i>	09020603008	18.67	22.06	7	CF	2.0	2.4
<i>Polycentropus</i>	09020603010	5.33	6.30	6	PR	0.6	0.7
Hydropsychidae	09020604	48.00			--	5.2	
<i>Cheumatopsyche</i>	09020604015	53.33	69.33	5	CF	5.7	7.5
<i>Hydropsyche</i>	09020604016	74.67	130.00	4	CF	8.0	14.0
<i>Hydropsyche morosa</i>	09020604016030	1.33			--	0.1	
<i>Hydropsyche simulans</i>	09020604016049	2.67			--	0.3	
<i>Hydropsyche placoda</i>	09020604016059	21.33			--	2.3	



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Log Number: 2258	Subsample Factor: X4	Replicates: 3
		Calculated: 11/6/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Macrostemum</i>	09020604018		8.67	3	CF		0.9
<i>Macrostemum zebratum</i>	09020604018054	6.67			--	0.7	
<i>Hydroptila</i>	09020607026	12.00	12.00	6	P	1.3	1.3
<i>Oxyethira</i>	09020607028			3	P		
<i>Micrasema</i>	09020609044		2.67	2	SH		0.3
<i>Micrasema wataga</i>	09020609044101	2.67			--	0.3	
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.1	0.1
Leptoceridae	09020618				--		
<i>Oecetis</i>	09020618078	1.33	1.33	8	PR	0.1	0.1
<i>Corydalus</i>	09020701002		1.33	6	PR		0.1
<i>Corydalus cornutus</i>	09020701002002	1.33			--	0.1	
Chironomidae	09021011	6.67			--	0.7	
<i>Ablabesmyia</i>	09021011001		2.72	8	PR		0.3
<i>Ablabesmyia mallochii</i>	09021011001004	2.67			--	0.3	
<i>Labrundinia</i>	09021011008		1.36	7	PR		0.1
<i>Labrundinia virescens</i>	09021011008023	1.33			--	0.1	
<i>Nilotanytus</i>	09021011012		1.36	6	PR		0.1
<i>Nilotanytus americanus</i>	09021011012028	1.33			--	0.1	
<i>Pentaneura</i>	09021011014		16.30	6	PR		1.8
<i>Pentaneura inconspicua</i>	09021011014028	16.00			--	1.7	
<i>Rheopelopia</i>	09021011017	1.33	4.07		PR	0.1	0.4
<i>Rheopelopia acra group</i>	09021011017036	2.67			--	0.3	
<i>Potthastia</i>	09021011026		16.30	2	CG		1.8
<i>Potthastia gaedii</i>	09021011026045	16.00			--	1.7	
<i>Cricotopus</i>	09021011037	4.00	25.80	7	SH	0.4	2.8
<i>Cricotopus bicinctus</i>	09021011037057	1.33			--	0.1	
<i>Cricotopus vierriensis</i>	09021011037071	20.00			--	2.2	
<i>Nanocladius</i>	09021011049		4.07	3	CG		0.4
<i>Nanocladius minimus</i>	09021011049088				--		
<i>Nanocladius downesi</i>	09021011049092	4.00			--	0.4	
<i>Orthocladius</i>	09021011050	1.33	9.51	6	CG	0.1	1.0
<i>Orthocladius carlatus</i>	09021011050093	8.00			--	0.9	
<i>Rheocricotopus</i>	09021011057		19.01	6	CG		2.0
<i>Rheocricotopus robacki</i>	09021011057105	18.67			--	2.0	
<i>Thienemanniella</i>	09021011062		1.36	6	CG		0.1
<i>Thienemanniella lobapodema</i>	09021011062114	1.33			--	0.1	
<i>Tvetenia</i>	09021011065		23.08	5	CG		2.5
<i>Tvetenia vitracies</i>	09021011065113	22.67			--	2.4	



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<i>Rheotanytarsus</i>	09021011072		32.59	6	CF		3.5
<i>Rheotanytarsus exiguus</i>	09021011072127	21.33			CF	2.3	
<i>Rheotanytarsus pellucidus</i>	09021011072128	10.67			CF	1.1	
<i>Tanytarsus</i>	09021011076	8.00	17.65	6	CF	0.9	1.9
<i>Tanytarsus buckleyi</i>	09021011076139	9.33			CF	1.0	
<i>Dicrotendipes</i>	09021011085		20.37	8	CG		2.2
<i>Dicrotendipes neomodestus</i>	09021011085152	20.00			--	2.2	
<i>Microtendipes</i>	09021011094		21.73	6	CF		2.3
<i>Microtendipes pedellus group</i>	09021011094166	4.00			--	0.4	
<i>Microtendipes rydalensis group</i>	09021011094168	17.33			--	1.9	
<i>Polypedilum</i>	09021011102		150.73	6	SH		16.2
<i>Polypedilum flavum</i>	09021011102182	144.00			--	15.5	
<i>Polypedilum illinoense group</i>	09021011102185	4.00			--	0.4	
<i>Optioservus</i>	09021113067	2.67	2.67	3	SC	0.3	0.3
<i>Stenelmis</i>	09021113070		4.00	5	SC		0.4
<i>Stenelmis concinna</i>	09021113070054	4.00			--	0.4	
<i>Amnicola</i>	10010104013		12.00		SC		1.3
<i>Amnicola limosa</i>	10010104013018	12.00			--	1.3	