



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

Station Information

Station Number: S-857	DEP Drainage: Androscoggin
Waterbody: Unnamed Stream (lewiston) - Station 857	HUC8: 01040002
Town: Lewiston	HUC8 Name: Lower Androscoggin
Directions: DOWNSTREAM OF LEWISTON MUNICIPAL LANDFILL	Latitude: 44 2 45.29 N
	Longitude: 70 11 4.93 W
	Stream Order: 1

Sample Information

Log Number: 1749	Type of Sample: ROCK BAG	Date Deployed: 7/24/2008
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/21/2008

Classification Attainment

Statutory Class: B	Final Determination: NA	Date: 4/6/2009
Model Result with P>.6: NA	Reason for Determination: Model	
Date Last Calculated: 4/6/2009	Comments:	

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.00	Class C	0.34	Class A, B, or C	0.00
Class B	0.00	NA	0.66	Non-Attainment	1.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B			0.00	Class A	0.01
Class C or Non-Attainment			1.00	Class B or C or Non-Attainment	0.99

Model Variables

01 Total Mean Abundance	226.00	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	50.00	19 EPT Generic Richness	5.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	15.95
04 Ephemeroptera Mean Abundance	0.33	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	4.03	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	73.21
06 Hilsenhoff Biotic Index	5.87	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.77	28 EP Generic Richness/14	0.07
08 Relative Generic Richness Diptera	0.68	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera	0.15		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.14		
15 Perlidae Mean Abundance	0.00		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	16.31		
(Family Functional Group)			
17 Chironomini Abundance (Family	39.87		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Tanytarsus</i>	29.99
2	<i>Microtendipes</i>	9.14
3	<i>Parametriocnemus</i>	6.90
4	<i>Limnodrilus</i>	6.64
5	<i>Stylodrilus</i>	6.64



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

Station Number: S-857

Town: Lewiston

Date Deployed: 7/24/2008

Log Number: 1749

Waterbody: Unnamed Stream (lewiston) - Station 85

Date Retrieved: 8/21/2008

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 19.4 deg C
Dissolved Oxygen: 8.4 mg/l
Specific Conductance: 187 uS/cm
Velocity: 43 cm/s
pH: 7.4
Wetted Width: 3.3 m
Bankfull Width: 3.3 m
Depth: 45 cm

Waterbody Information - Retrieval

Temperature: 14.6 deg C
Dissolved Oxygen: 8.9 mg/l
Specific Conductance: 166 uS/cm
Velocity: 19 cm/s
pH: 7.6
Wetted Width: 2.6 m
Bankfull Width: 4 m
Depth: 43 cm

Water Chemistry - Retrieval

Ammonia As Nitrogen	0.26 mg/l	Soluble Reactive Phosphorus	5 ug/l
Nitrate+nitrite As N	0.33 mg/l	Total Phosphorus	0.015 mg/l
Total Kjeldahl Nitrogen	0.5 mg/l	Total Suspended Solids	<2 mg/l
Dissolved Organic Carbon	5.2 mg/l	Total Dissolved Solids	24 mg/l

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Swamp Hardwood	Canopy Partly Open	Rolling Terrain
Upland Hardwood		
Urban		

<u>Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Below Landfill	Boulder	10 %
	Below Road Crossing	Detritus	5 %
	Below Urban NPS	Gravel	30 %
		Rubble/Cobble	40 %
		Sand	15 %

Landcover Summary - 2004 Data

Sample Comments

BELOW LEWISTON MUNICIPAL LANDFILL



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report**

Station Number: S-857 Waterbody: Unnamed Stream (lewiston) - Station 857 Town: Lewiston
Log Number: 1749 Subsample Factor: X1 Replicates: 3 Calculated: 4/6/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Tubificidae	08020203	28.67			--	12.7	
<i>Limnodrilus</i>	08020203005		15.00		CG		6.6
<i>Limnodrilus hoffmeisteri</i>	08020203005003	0.67			--	0.3	
<i>Stylodrilus</i>	08020203011		15.00		--		6.6
<i>Stylodrilus heringianus</i>	08020203011001	0.67			--	0.3	
Lumbricidae	08020205	0.67	0.67		--	0.3	0.3
<i>Caecidotea</i>	09010101001	6.67	6.67	8	SH	2.9	2.9
<i>Synurella</i>	09010202006		2.00		--		0.9
<i>Synurella chamberlaini</i>	09010202006001	2.00			--	0.9	
<i>Hyaella</i>	09010203006		0.33	8	CG		0.1
<i>Hyaella azteca</i>	09010203006011	0.33			--	0.1	
<i>Boyeria</i>	09020301004		2.00	2	PR		0.9
<i>Boyeria vinosa</i>	09020301004012	2.00			--	0.9	
<i>Ischnura</i>	09020309052	0.33	0.33	9	PR	0.1	0.1
<i>Centropetium</i>	09020401003	0.33	0.33	2	CG	0.1	0.1
<i>Lype</i>	09020602004		0.33	2	SC		0.1
<i>Lype diversa</i>	09020602004005	0.33			--	0.1	
<i>Rhyacophila</i>	09020605019	0.33	0.33	2	PR	0.1	0.1
<i>Oligostomis</i>	09020608039	0.33	0.33	2	PR	0.1	0.1
<i>Psilotreta</i>	09020614068		0.33	0	SC		0.1
<i>Psilotreta frontalis</i>	09020614068134	0.33			--	0.1	
<i>Sialis</i>	09020702004	2.33	2.33	4	PR	1.0	1.0
<i>Tipula</i>	09021001002	2.00	2.00	4	SH	0.9	0.9
<i>Dicranota</i>	09021001005	0.33	0.33	3	PR	0.1	0.1
<i>Pseudolimnophila</i>	09021001014	1.67	1.67	2	--	0.7	0.7
Ceratopogonidae	09021010				--		
<i>Proteozia</i>	09021010041	0.67	0.67	6	PR	0.3	0.3
Chironomidae	09021011	14.00			--	6.2	
<i>Ablabesmyia</i>	09021011001		5.44	8	PR		2.4
<i>Ablabesmyia mallochii</i>	09021011001004	5.00			--	2.2	
<i>Conchapelopia</i>	09021011004	0.67	0.72	6	PR	0.3	0.3
<i>Natarsia</i>	09021011011	0.67	6.89	8	PR	0.3	3.0
<i>Natarsia baltimorea</i>	09021011011026	5.67			--	2.5	
<i>Paramerina</i>	09021011013	1.00	1.09		--	0.4	0.5
<i>Trissopelopia</i>	09021011021		1.81		PR		0.8
<i>Trissopelopia ogemawi</i>	09021011021042	1.67			--	0.7	
<i>Zavrelimyia</i>	09021011022	0.33	0.36	8	PR	0.1	0.2
<i>Pagastia</i>	09021011025		2.54	1	--		1.1



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-857 Waterbody: Unnamed Stream (lewiston) - Station 857 Town: Lewiston
Log Number: 1749 Subsample Factor: X1 Replicates: 3 Calculated: 4/6/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Pagastia orthogonia</i>	09021011025001	2.33			--	1.0	
<i>Brillia</i>	09021011033	0.33	0.36	5	SH	0.1	0.2
<i>Chaetocladius</i>	09021011035	0.33	0.36	6	CG	0.1	0.2
<i>Corynoneura</i>	09021011036	1.67	1.81	7	CG	0.7	0.8
<i>Diplocladius</i>	09021011038	1.33	1.45	8	CG	0.6	0.6
<i>Heterotrissocladius</i>	09021011044		3.62	0	CG		1.6
<i>Heterotrissocladius marcidus</i>	09021011044083	3.33			--	1.5	
<i>Parachaetocladius</i>	09021011051	0.33	0.36		CG	0.1	0.2
<i>Parakiefferiella</i>	09021011052	0.33	0.36		CG	0.1	0.2
<i>Parametriocnemus</i>	09021011053	14.00	15.58	5	CG	6.2	6.9
<i>Parametriocnemus sp. f epler</i>	09021011053101	0.33			--	0.1	
<i>Micropsectra</i>	09021011070	11.67	12.69	7	CG	5.2	5.6
<i>Paratanytarsus</i>	09021011071	4.00	4.35	6	--	1.8	1.9
<i>Rheotanytarsus</i>	09021011072	2.33	2.54	6	CF	1.0	1.1
<i>Stempellinella</i>	09021011074		3.99	2	--		1.8
<i>Stempellinella leptocelloides</i>	09021011074001	3.67			--	1.6	
<i>Tanytarsus</i>	09021011076	62.33	67.78	6	CF	27.6	30.0
<i>Chironomus</i>	09021011080			10	CG		
<i>Cryptochironomus</i>	09021011082	0.33	0.36	8	PR	0.1	0.2
<i>Dicrotendipes</i>	09021011085	3.00	3.26	8	CG	1.3	1.4
<i>Microtendipes</i>	09021011094		20.66	6	CF		9.1
<i>Microtendipes pedellus group</i>	09021011094166	19.00			--	8.4	
<i>Paracladopelma</i>	09021011098		2.17	7	--		1.0
<i>Paracladopelma undine</i>	09021011098177	2.00			--	0.9	
<i>Paratendipes</i>	09021011100		1.81	8	CG		0.8
<i>Paratendipes albimanus group</i>	09021011100176	1.67			--	0.7	
<i>Phaenopsectra</i>	09021011101		0.36	7	SC		0.2
<i>Phaenopsectra flavipes</i>	09021011101179	0.33			SC	0.1	
<i>Polypedilum</i>	09021011102		10.15	6	SH		4.5
<i>Polypedilum aviceps</i>	09021011102181	0.33			--	0.1	
<i>Polypedilum fallax group</i>	09021011102183	0.33			--	0.1	
<i>Polypedilum illinoense group</i>	09021011102185	1.33			--	0.6	
<i>Polypedilum scalaenum group</i>	09021011102189	7.33			--	3.2	
<i>Stictochironomus</i>	09021011106	1.00	1.09	9	CG	0.4	0.5
<i>Helopelopia</i>	09021011114	0.33	0.36	6	PR	0.1	0.2
<i>Roederiodes</i>	09021016058	0.33	0.33	3	PR	0.1	0.1
<i>Oulimnius</i>	09021113068		0.33		--		0.1
<i>Oulimnius latiusculus</i>	09021113068049	0.33			--	0.1	



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-857 Waterbody: Unnamed Stream (lewiston) - Station 857 Town: Lewiston
Log Number: 1749 Subsample Factor: X1 Replicates: 3 Calculated: 4/6/2009

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Hydrozetes</i>	09030115001	0.33	0.33		--	0.1	0.1