



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

**Station Information**

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

**Sample Information**

<b>Log Number:</b> 2644	Type of Sample:	ROCK BAG	Date Deployed:	7/10/2018
Subsample Factor: X1	Replicates:	3	Date Retrieved:	8/7/2018

**Classification Attainment**

<b>Statutory Class:</b> B	<b>Final Determination:</b> NA	Date:	10/24/2018
Model Result with $P \geq 0.6$ : NA	<b>Reason for Determination:</b> Model		
Date Last Calculated: 10/23/2018	Comments:		

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.00	Class A, B, or C	0.00
Class B	0.00	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	92.67	18 Relative Abundance Ephemeroptera	0.01
02 Generic Richness	15.00	19 EPT Generic Richness	2.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	0.67	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.12	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	1.33
06 Hilsenhoff Biotic Index	7.48	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.28	28 EP Generic Richness/14	0.07
08 Relative Generic Richness Diptera	0.47	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.33		
12 EPT Generic Richness/ Diptera Generic Richness	0.29		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	4.00		
17 Chironomini Abundance (Family Functional Group)	16.00		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Caecidotea</i>	61.51
2	<i>Microtendipes</i>	12.59
3	Cambaridae	5.04
4	<i>Rheotanytarsus</i>	5.04
5	<i>Stictochironomus</i>	4.32



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**Station Number: S-857**      Town: Lewiston      Date Deployed: 7/10/2018  
**Log Number: 2644**      Waterbody: Unnamed Stream (lewiston) - Station 857      Date Retrieved: 8/7/2018

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: MICHAEL COLE

**Waterbody Information - Deployment**

Temperature: 18.1 deg C  
Dissolved Oxygen: 7.09 mg/l  
Dissolved Oxygen Saturation: 74.4 %  
Specific Conductance: 1046 uS/cm  
Velocity: 6.096 cm/s  
pH: 7.57  
Wetted Width: 2.9 m  
Bankfull Width: 3.45 m  
Depth: 22 cm

**Waterbody Information - Retrieval**

Temperature: 20.4 deg C  
Dissolved Oxygen: 7.9 mg/l  
Dissolved Oxygen Saturation: 86.8 %  
Specific Conductance: 956 uS/cm  
Velocity: 6.096 cm/s  
pH: 7.65  
Wetted Width: 3 m  
Bankfull Width: 3.45 m  
Depth: 23 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Swamp Hardwood	Partly Open	Rolling	
Upland Hardwood			
Urban			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Urban Runoff	Below Road Crossing	Boulder	10 %
		Gravel	30 %
		Muck	5 %
		Rubble/Cobble	40 %
		Sand	15 %

**Landcover Summary - 2004 Data**

Total Area (ac)	544	High Int. Dev. %	3.8	Water %	0.0	Non-vegetated %	0.0
		Med Int. Dev. %	7.7	Wetland %	1.3	Tilled Agriculture %	3.3
		Low Int. Dev. %	8.3	Upland Woody %	58.9	Grassland %	10.0
		Development %	19.7	Natural %	60.5	Human Altered %	39.4
						Impervious %	6.3

**Sample Comments**

FROG, SALAMANDER



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

**Station Number: S-857**      Waterbody: Unnamed Stream (lewiston) - Station 857      Town: Lewiston  
**Log Number: 2644**      Subsample Factor: X1      Replicates: 3      Calculated: 10/23/2018

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Naididae	08020202	0.33	0.33		--	0.4	0.4
<i>Caecidotea</i>	09010101001	57.00	57.00	8	SH	61.5	61.5
<i>Synurella</i>	09010202006	3.33	3.33		--	3.6	3.6
Cambaridae	09010301	4.67	4.67		--	5.0	5.0
<i>Orconectes</i>	09010301008	0.33	0.33		CG	0.4	0.4
Aeshnidae	09020301	0.33	0.33		--	0.4	0.4
<i>Tricorythodes</i>	09020411038	0.67	0.67	4	CG	0.7	0.7
<i>Cheumatopsyche</i>	09020604015	0.33	0.33	5	CF	0.4	0.4
<i>Paramerina</i>	09021011013	2.33	2.33		--	2.5	2.5
<i>Thienemannimyia</i>	09021011020		1.67	3	PR		1.8
<i>Thienemannimyia group</i>	09021011020041	1.67			--	1.8	
<i>Rheotanytarsus</i>	09021011072		4.67	6	CF		5.0
<i>Rheotanytarsus exiguus group</i>	09021011072127	4.67			CF	5.0	
<i>Tanytarsus</i>	09021011076	1.00	1.00	6	CF	1.1	1.1
<i>Chironomus</i>	09021011080	0.33	0.33	10	CG	0.4	0.4
<i>Microtendipes</i>	09021011094		11.67	6	CF		12.6
<i>Microtendipes pedellus group</i>	09021011094166	11.67			--	12.6	
<i>Stictochironomus</i>	09021011106	4.00	4.00	9	CG	4.3	4.3