



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

Station Information

Station Number: S-41	River Basin: Androscoggin
Waterbody: Androscoggin River - Station 41	HUC8 Name: Lower Androscoggin
Town: Mexico	Latitude: 44 31 55.58 N
Directions: 4.2 KM BELOW BOISE CASCADE MILL	Longitude: 70 28 14.47 W
	Stream Order: 6

Sample Information

Log Number: 2668	Type of Sample: ROCK BASKET	Date Deployed: 7/23/2018
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/20/2018

Classification Attainment

Statutory Class: C	Final Determination: A	Date: 3/11/2019
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 3/8/2019	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.60	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	1.00	Class A	0.91
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.09

Model Variables

01 Total Mean Abundance	1050.67	18 Relative Abundance Ephemeroptera	0.17
02 Generic Richness	43.00	19 EPT Generic Richness	23.00
03 Plecoptera Mean Abundance	12.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	1.33
04 Ephemeroptera Mean Abundance	181.33	23 Relative Generic Richness- Plecoptera	0.05
05 Shannon-Wiener Generic Diversity	3.49	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	42.67
06 Hilsenhoff Biotic Index	3.42	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	81.33
07 Relative Abundance - Chironomidae	0.12	28 EP Generic Richness/14	0.93
08 Relative Generic Richness Diptera	0.30	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	257.33		
11 <i>Cheumatopsyche</i> Abundance	26.67		
12 EPT Generic Richness/ Diptera Generic Richness	1.77		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	12.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	5.33		
17 Chironomini Abundance (Family Functional Group)	38.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Chimarra</i>	30.96
2	<i>Hydropsyche</i>	24.49
3	<i>Maccaffertium</i>	6.98
4	<i>Rheotanytarsus</i>	4.70
5	<i>Simulium</i>	4.70



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Station Number: S-41 Town: Mexico Date Deployed: 7/23/2018
Log Number: 2668 Waterbody: Androscoggin River - Station 41 Date Retrieved: 8/20/2018

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature: 23.2 deg C
Dissolved Oxygen: 9.28 mg/l
Dissolved Oxygen Saturation: 107.2 %
Specific Conductance: 79.4 uS/cm
Velocity: 61 cm/s
pH: 7.26
Wetted Width: 166 m
Bankfull Width: 166 m
Depth: 45 cm

Waterbody Information - Retrieval

Temperature: 22.8 deg C
Dissolved Oxygen: 9.95 mg/l
Dissolved Oxygen Saturation: 114.3 %
Specific Conductance: 70.3 uS/cm
Velocity: 64 cm/s
pH: 7.29
Wetted Width: 166 m
Bankfull Width: 166 m
Depth: 56 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Conifer	Open	Rolling	
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Nutrients	Below Point Source	Boulder	10 %
Organic Solids	Below Road Crossing	Gravel	20 %
		Rubble/Cobble	50 %
		Sand	20 %

Landcover Summary - 2004 Data

Sample Comments



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

Station Number: S-41

Waterbody: Androscoggin River - Station 41

Town: Mexico

Log Number: 2668

Subsample Factor: X4

Replicates: 3

Calculated: 3/8/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Perlidae	09020209	4.00	4.00		--	0.4	0.4
<i>Acroneuria</i>	09020209042	2.67	8.00	0	PR	0.3	0.8
<i>Acroneuria lycorias</i>	09020209042125	5.33			--	0.5	
<i>Boyeria</i>	09020301004		2.67	2	PR		0.3
<i>Boyeria grafiana</i>	09020301004011	2.67			--	0.3	
<i>Baetis</i>	09020401001		9.33	4	CG		0.9
<i>Baetis intercalaris</i>	09020401001008	9.33			--	0.9	
<i>Heterocloeon</i>	09020401005		17.33	2	SC		1.6
<i>Heterocloeon curiosum</i>	09020401005020	17.33			--	1.6	
<i>Acerpenna</i>	09020401007		12.00	5	CG		1.1
<i>Acerpenna pygmaea</i>	09020401007011	12.00			--	1.1	
<i>Plauditus</i>	09020401012	20.00	20.00		CG	1.9	1.9
<i>Epeorus</i>	09020402009	5.33	5.33	0	SC	0.5	0.5
<i>Leucrocuta</i>	09020402011	24.00	24.00	1	SC	2.3	2.3
<i>Stenacron</i>	09020402014	2.67	2.67	7	SC	0.3	0.3
<i>Maccaffertium</i>	09020402015	72.00	73.33	4	SC	6.9	7.0
<i>Maccaffertium modestum</i>	09020402015051	1.33			--	0.1	
<i>Isonychia</i>	09020404018		13.33	2	CF		1.3
<i>Isonychia bicolor</i>	09020404018059	13.33			--	1.3	
<i>Ephemerella</i>	09020410035	1.33	1.33	1	CG	0.1	0.1
<i>Serratella</i>	09020410037		2.67	2	CG		0.3
<i>Serratella deficiens (Teloganopsis deficiens)</i>	09020410037121	1.33			--	0.1	
<i>Serratella serratoides</i>	09020410037124	1.33			--	0.1	
Philopotamidae	09020601				--		
<i>Chimarra</i>	09020601003	58.67	325.33	2	CF	5.6	31.0
<i>Chimarra socia</i>	09020601003004	266.67			--	25.4	
<i>Cheumatopsyche</i>	09020604015	26.67	26.67	5	CF	2.5	2.5
<i>Hydropsyche</i>	09020604016	90.67	257.33	4	CF	8.6	24.5
<i>Hydropsyche bronta</i>	09020604016029	1.33			--	0.1	
<i>Hydropsyche morosa</i>	09020604016030	49.33			--	4.7	
<i>Hydropsyche sparna</i>	09020604016032	24.00			--	2.3	
<i>Hydropsyche phalerata</i>	09020604016047	13.33			--	1.3	
<i>Hydropsyche scalaris species group</i>	09020604016048	78.67			--	7.5	
<i>Macrostemum</i>	09020604018	21.33	21.33	3	CF	2.0	2.0
<i>Rhyacophila</i>	09020605019		10.67	2	PR		1.0
<i>Rhyacophila minora</i>	09020605019063	10.67			PR	1.0	
<i>Protoptila</i>	09020606022	1.33	1.33	1	SC	0.1	0.1



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		Actual	Adjusted			Actual	Adjusted
Hydroptilidae	09020607				--		
<i>Hydroptila</i>	09020607026	21.33	21.33	6	P	2.0	2.0
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.1	0.1
<i>Ceraclea</i>	09020618072	1.33	1.33	3	CG	0.1	0.1
<i>Oecetis</i>	09020618078	1.33	1.33	8	PR	0.1	0.1
<i>Nigronia</i>	09020701003		1.33	0	PR		0.1
<i>Nigronia serricornis</i>	09020701003003	1.33			--	0.1	
<i>Nilotanytus</i>	09021011012		2.67	6	PR		0.3
<i>Nilotanytus fimbriatus</i>	09021011012027	2.67			--	0.3	
<i>Thienemannimyia</i>	09021011020		2.67	3	PR		0.3
<i>Thienemannimyia group</i>	09021011020041	2.67			--	0.3	
<i>Cricotopus</i>	09021011037	2.67	8.00	7	SH	0.3	0.8
<i>Cricotopus bicinctus</i>	09021011037057	5.33			--	0.5	
<i>Nanocladius</i>	09021011049	6.67	6.67	3	CG	0.6	0.6
<i>Rheocricotopus</i>	09021011057	2.67	2.67	6	CG	0.3	0.3
<i>Tvetenia</i>	09021011065		2.67	5	CG		0.3
<i>Tvetenia vitracies</i>	09021011065113	2.67			--	0.3	
<i>Micropsectra</i>	09021011070	1.33	1.33	7	CG	0.1	0.1
<i>Rheotanytarsus</i>	09021011072	12.00	49.33	6	CF	1.1	4.7
<i>Rheotanytarsus exiguus group</i>	09021011072127	36.00			CF	3.4	
<i>Rheotanytarsus pellucidus</i>	09021011072128	1.33			CF	0.1	
<i>Stempellinella</i>	09021011074	2.67	2.67	2	--	0.3	0.3
<i>Tanytarsus</i>	09021011076	8.00	8.00	6	CF	0.8	0.8
<i>Microtendipes</i>	09021011094		2.67	6	CF		0.3
<i>Microtendipes pedellus group</i>	09021011094166	1.33			--	0.1	
<i>Microtendipes rydalensis group</i>	09021011094168	1.33			--	0.1	
<i>Polypedilum</i>	09021011102		36.00	6	SH		3.4
<i>Polypedilum aviceps</i>	09021011102181	4.00			--	0.4	
<i>Polypedilum flavum</i>	09021011102182	32.00			--	3.0	
<i>Simulium</i>	09021012047	49.33	49.33	4	CF	4.7	4.7
<i>Stenelmis</i>	09021113070	1.33	1.33	5	SC	0.1	0.1
<i>Amnicola</i>	10010104013	1.33	1.33		SC	0.1	0.1
<i>Ferrissia</i>	10010204035	1.33	1.33		SC	0.1	0.1
<i>Pisidium</i>	10020201002	5.33	5.33		CF	0.5	0.5
<i>Sphaerium</i>	10020201003	1.33	1.33		CF	0.1	0.1