



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

Station Information

Station Number: S-954	River Basin: Androscoggin
Waterbody: Androscoggin River - Station 954	HUC8 Name: Lower Androscoggin
Town: Brunswick	Latitude: 43 57 19.82 N
Directions: BELOW PEJEPSCOT DAM; UP RIVER RD FROM BRUNSWICK TO PUBLIC FISHING PARK ACCESS AND CANOE PORTAGE	Longitude: 70 1 26.95 W Stream Order: 5

Sample Information

Log Number: 2660	Type of Sample: ROCK BAG	Date Deployed: 7/17/2018
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/14/2018

Classification Attainment

Statutory Class: C	Final Determination: A	Date: 11/30/2018
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 11/29/2018	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.59	Class C	0.01
Class B	0.41	NA	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.87
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.13

Model Variables

01 Total Mean Abundance	669.33	18 Relative Abundance Ephemeroptera	0.39
02 Generic Richness	47.00	19 EPT Generic Richness	25.00
03 Plecoptera Mean Abundance	18.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	1.33
04 Ephemeroptera Mean Abundance	264.00	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	4.14	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	62.67
06 Hilsenhoff Biotic Index	4.46	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	87.70
07 Relative Abundance - Chironomidae	0.07	28 EP Generic Richness/14	0.86
08 Relative Generic Richness Diptera	0.30	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	94.67		
11 <i>Cheumatopsyche</i> Abundance	49.33		
12 EPT Generic Richness/ Diptera Generic Richness	1.79		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	18.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	8.00		
17 Chironomini Abundance (Family Functional Group)	14.67		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Acerpenna</i>	19.52
2	<i>Hydropsyche</i>	14.14
3	<i>Maccaffertium</i>	10.53
4	<i>Cheumatopsyche</i>	7.37
5	<i>Macrostemum</i>	7.37



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Station Number: S-954 Town: Brunswick Date Deployed: 7/17/2018
Log Number: 2660 Waterbody: Androscoggin River - Station 954 Date Retrieved: 8/14/2018

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature: 25.2 deg C
Dissolved Oxygen: 8.85 mg/l
Dissolved Oxygen Saturation: 106 %
Specific Conductance: 100.9 uS/cm
Velocity: 61 cm/s
pH: 7.23
Wetted Width: 85 m
Bankfull Width: 103 m
Depth: 63 cm

Waterbody Information - Retrieval

Temperature: 24.5 deg C
Dissolved Oxygen: 9.91 mg/l
Dissolved Oxygen Saturation: 108.7 %
Specific Conductance: 74.4 uS/cm
Velocity: 64 cm/s
pH: 7.11
Wetted Width: 85 m
Bankfull Width: 103 m
Depth: 65 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Hardwood	Open	Hilly	
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Altered Hydrology	Below Dam	Boulder	5 %
		Gravel	20 %
		Rubble/Cobble	75 %

Landcover Summary - 2004 Data

Sample Comments



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

Station Number: S-954

Waterbody: Androscoggin River - Station 954

Town: Brunswick

Log Number: 2660

Subsample Factor: X4

Replicates: 3

Calculated: 11/29/2018

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
<i>Girardia</i>	03010102002	6.67	6.67		--	1.0	1.0
Crangonyctidae	09010202	1.33	1.33		--	0.2	0.2
<i>Hyaella</i>	09010203006	2.67	2.67	8	CG	0.4	0.4
Perlidae	09020209	1.33			--	0.2	
<i>Acroneuria</i>	09020209042	5.33	17.23	0	PR	0.8	2.6
<i>Acroneuria lycorias</i>	09020209042125	10.67			--	1.6	
<i>Paragnetina</i>	09020209049	1.33	1.44	1	PR	0.2	0.2
<i>Argia</i>	09020309048	1.33	1.33	7	PR	0.2	0.2
<i>Baetis</i>	09020401001		22.67	4	CG		3.4
<i>Baetis flavistriga</i>	09020401001004	4.00			--	0.6	
<i>Baetis intercalaris</i>	09020401001008	18.67			--	2.8	
<i>Acerpenna</i>	09020401007		130.67	5	CG		19.5
<i>Acerpenna pygmaea</i>	09020401007011	130.67			--	19.5	
<i>Acentrella</i>	09020401008		1.33	3	CG		0.2
<i>Acentrella parvula</i>	09020401008002	1.33			--	0.2	
<i>Procloeon</i>	09020401010	6.67	6.67		CG	1.0	1.0
<i>Iswaeon</i>	09020401015		1.33		--		0.2
<i>Iswaeon anoka</i>	09020401015001	1.33			--	0.2	
Heptageniidae	09020402	1.33			--	0.2	
<i>Leucrocuta</i>	09020402011	10.67	10.84	1	SC	1.6	1.6
<i>Stenacron</i>	09020402014	1.33	1.36	7	SC	0.2	0.2
<i>Maccaffertium</i>	09020402015	16.00	70.47	4	SC	2.4	10.5
<i>Maccaffertium exiguum</i>	09020402015046	10.67			--	1.6	
<i>Maccaffertium modestum</i>	09020402015051	42.67			--	6.4	
<i>Isonychia</i>	09020404018	1.33	8.00	2	CF	0.2	1.2
<i>Isonychia bicolor</i>	09020404018059	6.67			--	1.0	
<i>Tricorythodes</i>	09020411038	10.67	10.67	4	CG	1.6	1.6
<i>Chimarra</i>	09020601003		2.67	2	CF		0.4
<i>Chimarra socia</i>	09020601003004	2.67			--	0.4	
Polycentropodidae	09020603	6.67	6.67		--	1.0	1.0
<i>Neureclipsis</i>	09020603008	46.67	46.67	7	CF	7.0	7.0
<i>Cheumatopsyche</i>	09020604015	49.33	49.33	5	CF	7.4	7.4
<i>Hydropsyche</i>	09020604016	33.33	94.67	4	CF	5.0	14.1
<i>Hydropsyche morosa</i>	09020604016030	4.00			--	0.6	
<i>Hydropsyche phalerata</i>	09020604016047	16.00			--	2.4	
<i>Hydropsyche scalaris species group</i>	09020604016048	41.33			--	6.2	
<i>Macrostemum</i>	09020604018	49.33	49.33	3	CF	7.4	7.4



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		Actual	Adjusted			Actual	Adjusted
<i>Protoptila</i>	09020606022	1.33	1.33	1	SC	0.2	0.2
Hydroptilidae	09020607				--		
<i>Hydroptila</i>	09020607026	1.33	1.33	6	P	0.2	0.2
<i>Micrasema</i>	09020609044	5.33	5.33	2	SH	0.8	0.8
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.2	0.2
<i>Ceraclea</i>	09020618072	5.33	5.33	3	CG	0.8	0.8
<i>Nectopsyche</i>	09020618074	1.33	1.33	3	SH	0.2	0.2
<i>Oecetis</i>	09020618078		10.67	8	PR		1.6
<i>Oecetis avara</i>	09020618078153	2.67			--	0.4	
<i>Oecetis persimilis</i>	09020618078157	8.00			--	1.2	
Chironomidae	09021011				--		
<i>Ablabesmyia</i>	09021011001	1.33	1.33	8	PR	0.2	0.2
<i>Pentaneura</i>	09021011014	5.33	5.33	6	PR	0.8	0.8
<i>Thienemannimyia</i>	09021011020		1.33	3	PR		0.2
<i>Thienemannimyia group</i>	09021011020041	1.33			--	0.2	
<i>Cricotopus</i>	09021011037	9.33	10.67	7	SH	1.4	1.6
<i>Cricotopus bicinctus</i>	09021011037057	1.33			--	0.2	
<i>Orthocladius</i>	09021011050	2.67	2.67	6	CG	0.4	0.4
<i>Synorthocladius</i>	09021011061	1.33	1.33	2	CG	0.2	0.2
<i>Thienemanniella</i>	09021011062	1.33	1.33	6	CG	0.2	0.2
<i>Tvetenia</i>	09021011065		2.67	5	CG		0.4
<i>Tvetenia vitracies</i>	09021011065113	2.67			--	0.4	
<i>Rheotanytarsus</i>	09021011072		5.33	6	CF		0.8
<i>Rheotanytarsus exiguus group</i>	09021011072127	1.33			CF	0.2	
<i>Rheotanytarsus pellucidus</i>	09021011072128	4.00			CF	0.6	
<i>Tanytarsus</i>	09021011076	1.33	1.33	6	CF	0.2	0.2
<i>Dicrotendipes</i>	09021011085	1.33	1.33	8	CG	0.2	0.2
<i>Microtendipes</i>	09021011094		1.33	6	CF		0.2
<i>Microtendipes rydalensis group</i>	09021011094168	1.33			--	0.2	
<i>Polypedilum</i>	09021011102		12.00	6	SH		1.8
<i>Polypedilum flavum</i>	09021011102182	12.00			--	1.8	
<i>Simulium</i>	09021012047	13.33	13.33	4	CF	2.0	2.0
<i>Psephenus</i>	09021108058		1.33	4	SC		0.2
<i>Psephenus herricki</i>	09021108058028	1.33			--	0.2	
<i>Promoesia</i>	09021113069		30.67		--		4.6
<i>Promoesia tardella</i>	09021113069052	30.67			--	4.6	
<i>Atractides</i>	09030102002	1.33	1.33		--	0.2	0.2
<i>Amnicola</i>	10010104013	4.00	4.00		SC	0.6	0.6