



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

Station Information

Station Number: S-359	River Basin:	Androscoggin	
Waterbody:	Sabattus River - Station 359	HUC8 Name:	Lower Androscoggin
Town:	Sabattus	Latitude:	44 4 24.34 N
Directions:	50 M BELOW CROWLEY RD BRIDGE CROSSING	Longitude:	70 6 17.27 W
		Stream Order:	3

Sample Information

Log Number: 2646	Type of Sample:	ROCK BAG	Date Deployed:	7/10/2018	
Subsample Factor:	X4	Replicates:	3	Date Retrieved:	8/7/2018

Classification Attainment

Statutory Class: C	Final Determination: C	Date:	3/29/2019
Model Result with $P \geq 0.6$:	C	Reason for Determination:	Model
Date Last Calculated:	3/29/2019	Comments:	

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.00	Class C	0.95	Class A, B, or C	1.00
Class B	0.00	NA	0.05	Non-Attainment	0.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B			0.00	Class A	0.00
Class C or Non-Attainment			1.00	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Mean Abundance	3288.00	18 Relative Abundance Ephemeroptera	0.02
02 Generic Richness	30.00	19 EPT Generic Richness	6.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	0.00
04 Ephemeroptera Mean Abundance	60.00	<i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	
05 Shannon-Wiener Generic Diversity	2.52	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	4.96	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	200.00
07 Relative Abundance - Chironomidae	0.55	<i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	
08 Relative Generic Richness Diptera	0.33	26 Sum of Abundances: <i>Acroneuria</i> ,	6.67
09 <i>Hydropsyche</i> Abundance	540.00	<i>Maccaffertium</i> , <i>Stenonema</i>	
11 <i>Cheumatopsyche</i> Abundance	200.00	28 EP Generic Richness/14	0.14
12 EPT Generic Richness/ Diptera	0.60	30 Presence of Class A Indicator Taxa/7	0.00
Generic Richness			
13 Relative Abundance - Oligochaeta	0.00	Five Most Dominant Taxa	
15 Perlidae Mean Abundance (Family	0.00	Rank	Taxon Name
Functional Group)		1	<i>Polypedilum</i>
16 Tanypodinae Mean Abundance	2.67	2	<i>Hydropsyche</i>
(Family Functional Group)		3	<i>Chimarra</i>
17 Chironomini Abundance (Family	1528.00	4	<i>Rheotanytarsus</i>
Functional Group)		5	<i>Cheumatopsyche</i>
			Percent
			46.43
			16.42
			13.42
			7.54
			6.08



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Station Number: S-359	Town: Sabattus	Date Deployed: 7/10/2018
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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	24.6 deg C
Dissolved Oxygen:	8.36 mg/l
Dissolved Oxygen Saturation:	99.6 %
Specific Conductance:	198.4 uS/cm
Velocity:	67.1 cm/s
pH:	7.37
Wetted Width:	14.5 m
Bankfull Width:	19 m
Depth:	25 cm

Waterbody Information - Retrieval

Temperature:	25.4 deg C
Dissolved Oxygen:	8.53 mg/l
Dissolved Oxygen Saturation:	103.2 %
Specific Conductance:	260 uS/cm
Velocity:	70.1 cm/s
pH:	7.08
Wetted Width:	14.5 m
Bankfull Width:	19 m
Depth:	23 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Pasture	Partly Open	Flat
Swamp Hardwood		
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Agricultural Runoff	Below Agriculture NPS	Bedrock 30 %
Lake Outlet	Below Dam	Boulder 40 %
Nps Pollution	Below Road Crossing	Rubble/Cobble 30 %
	Lake Outlet	

Landcover Summary - 2004 Data

Total Area (ac)	27029	High Int. Dev. %	0.4	Water %	7.4	Non-vegetated %	1.6
		Med Int. Dev. %	0.9	Wetland %	9.0	Tilled Agriculture %	2.8
		Low Int. Dev. %	5.0	Upland Woody %	57.6	Grassland %	14.4
		Development %	6.2	Natural %	66.6	Human Altered %	26.0
						Impervious %	5.2

Sample Comments

FISH, CRAYFISH



Maine Department of Environmental Protection
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Aquatic Life Taxonomic Inventory Report

Station Number: S-359

Waterbody: Sabattus River - Station 359

Town: Sabattus

Log Number: 2646

Subsample Factor: X4

Replicates: 3

Calculated: 3/29/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Girardia</i>	03010102002	126.67	126.67		--	3.9	3.9
<i>Prostoma</i>	04010101001	2.67	2.67		--	0.1	0.1
<i>Dero</i>	08020202007	1.33	1.33		CG	0.0	0.0
<i>Erpobdella</i>	08030203002	5.33	5.33		--	0.2	0.2
<i>Caecidotea</i>	09010101001	9.33	20.00	8	SH	0.3	0.6
<i>Caecidotea racovitzai racovitzai</i>	09010101001002	10.67			--	0.3	
<i>Hyaella</i>	09010203006	2.67	2.67	8	CG	0.1	0.1
<i>Baetis</i>	09020401001	6.67	53.33	4	CG	0.2	1.6
<i>Baetis flavistriga</i>	09020401001004	6.67			--	0.2	
<i>Baetis pluto</i>	09020401001009	40.00			--	1.2	
<i>Maccaffertium</i>	09020402015	2.67	6.67	4	SC	0.1	0.2
<i>Maccaffertium modestum</i>	09020402015051	4.00			--	0.1	
<i>Chimarra</i>	09020601003		441.33	2	CF		13.4
<i>Chimarra aterrima</i>	09020601003002	64.00			--	1.9	
<i>Chimarra obscura</i>	09020601003003	377.33			--	11.5	
Hydropsychidae	09020604				--		
<i>Cheumatopsyche</i>	09020604015	200.00	200.00	5	CF	6.1	6.1
<i>Hydropsyche</i>	09020604016	150.67	540.00	4	CF	4.6	16.4
<i>Hydropsyche morosa</i>	09020604016030	150.67			--	4.6	
<i>Hydropsyche sparna</i>	09020604016032	4.00			--	0.1	
<i>Hydropsyche betteni</i>	09020604016037	234.67			--	7.1	
<i>Ceraclea</i>	09020618072			3	CG		
<i>Oecetis</i>	09020618078	1.33	1.33	8	PR	0.0	0.0
<i>Thienemannimyia</i>	09021011020		2.67	3	PR		0.1
<i>Thienemannimyia group</i>	09021011020041	2.67			--	0.1	
<i>Cardiocladius</i>	09021011034	2.67	2.67	5	PR	0.1	0.1
<i>Nanocladius</i>	09021011049	10.67	10.67	3	CG	0.3	0.3
<i>Tvetenia</i>	09021011065		8.00	5	CG		0.2
<i>Tvetenia bavarica group</i>	09021011065111	2.67			--	0.1	
<i>Tvetenia vitracies</i>	09021011065113	5.33			--	0.2	
<i>Rheotanytarsus</i>	09021011072		248.00	6	CF		7.5
<i>Rheotanytarsus exiguus group</i>	09021011072127	248.00			CF	7.5	
<i>Endochironomus</i>	09021011087	1.33	1.33	10	SH	0.0	0.0
<i>Polypedilum</i>	09021011102		1526.67	6	SH		46.4
<i>Polypedilum flavum</i>	09021011102182	1526.67			--	46.4	
<i>Simulium</i>	09021012047	14.67	14.67	4	CF	0.4	0.4
<i>Hemerodromia</i>	09021016057	2.67	2.67	3	PR	0.1	0.1



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<i>Roederiodes</i>	09021016058	1.33	1.33	3	PR	0.0	0.0
<i>Microcylloepus</i>	09021113066		2.67	3	--		0.1
<i>Microcylloepus pusillus</i>	09021113066041	2.67			--	0.1	
<i>Promoresia</i>	09021113069		1.33		--		0.0
<i>Promoresia tardella</i>	09021113069052	1.33			--	0.0	
<i>Stenelmis</i>	09021113070	2.67	2.67	5	SC	0.1	0.1
<i>Physa</i>	10010202027	16.00	16.00		SC	0.5	0.5
<i>Menetus</i>	10010203031		1.33		--		0.0
<i>Menetus dilatatus</i>	10010203031059	1.33			--	0.0	
Sphaeriidae	10020201	21.33			CF	0.6	
<i>Musculium</i>	10020201001	4.00	7.76		CF	0.1	0.2
<i>Pisidium</i>	10020201002	6.67	12.94		CF	0.2	0.4
<i>Sphaerium</i>	10020201003	12.00	23.29		CF	0.4	0.7