



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

**Station Information**

<b>Station Number:</b> S-1156	River Basin: Androscoggin
Waterbody: West Branch Nezinscot River - Station 1156	HUC8 Name: Lower Androscoggin
Town: Sumner	Latitude: 44 23 57.55 N
Directions: DOWNSTREAM OF REDDING ROAD	Longitude: 70 28 7.75 W
	Stream Order: 1

**Sample Information**

<b>Log Number:</b> 2761	Type of Sample: ROCK BAG	Date Deployed: 7/25/2019
Subsample Factor: X1	Replicates: 2	Date Retrieved: 8/26/2019

**Classification Attainment**

<b>Statutory Class:</b> A	<b>Final Determination:</b> A	Date: 3/20/2020
Model Result with $P \geq 0.6$ : A	<b>Reason for Determination:</b> Model	
Date Last Calculated: 2/21/2020	Comments:	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.76	Class A, B, or C	1.00
Class B	0.24	Non-Attainment	0.00
		<u>A Model</u>	
<u>B or Better Model</u>		Class A	0.99
Class A or B	1.00	Class B or C or Non-Attainment	0.01
Class C or Non-Attainment	0.00		

**Model Variables**

01 Total Mean Abundance	277.00	18 Relative Abundance Ephemeroptera	0.24
02 Generic Richness	32.00	19 EPT Generic Richness	20.00
03 Plecoptera Mean Abundance	23.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	67.50	23 Relative Generic Richness- Plecoptera	0.16
05 Shannon-Wiener Generic Diversity	3.50	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	13.00
06 Hilsenhoff Biotic Index	3.47	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	19.00
07 Relative Abundance - Chironomidae	0.19	28 EP Generic Richness/14	0.79
08 Relative Generic Richness Diptera	0.22	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	90.50		
11 <i>Cheumatopsyche</i> Abundance	9.50		
12 EPT Generic Richness/ Diptera Generic Richness	2.86		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	2.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	3.00		
17 Chironomini Abundance (Family Functional Group)	32.50		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	32.67
2	<i>Ephemerella</i>	14.44
3	<i>Polypedilum</i>	11.55
4	<i>Maccaffertium</i>	6.32
5	<i>Peltoperla</i>	6.14



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**Station Number: S-1156**

Town: Sumner

Date Deployed: 7/25/2019

**Log Number: 2761**

Waterbody: West Branch Nezinscot River - Station 1156

Date Retrieved: 8/26/2019

**Sample Collection and Processing Information**

Sampling Organization:

Taxonomist: LOTIC INC.

**Waterbody Information - Deployment**

Temperature: 17.1 deg C  
 Dissolved Oxygen: 9.8 mg/l  
 Dissolved Oxygen Saturation: 101.5 %  
 Specific Conductance: 31.4 uS/cm  
 Velocity: 18.3 cm/s  
 pH: 6.9  
 Wetted Width: 6.1 m  
 Bankfull Width: 7.5 m  
 Depth: 30 cm

**Waterbody Information - Retrieval**

Temperature: 14.2 deg C  
 Dissolved Oxygen: 10.51 mg/l  
 Dissolved Oxygen Saturation: 101.4 %  
 Specific Conductance: 31.6 uS/cm  
 Velocity: 15.2 cm/s  
 pH: 6.89  
 Wetted Width: 6.1 m  
 Bankfull Width: 7.5 m  
 Depth: 28 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Conifer	Partly Open	Rolling	
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Below Road Crossing	Boulder	25 %
	Minimally Disturbed	Gravel	5 %
		Rubble/Cobble	20 %
		Sand	50 %

**Landcover Summary - 2004 Data**

**Sample Comments**

NO SIGN OF 3RD ROCK BAG.



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Aquatic Life Taxonomic Inventory Report**

**Station Number: S-1156**      Waterbody: West Branch Nezinscot River - Station 1156    Town: Sumner  
**Log Number: 2761**            Subsample Factor: X1                      Replicates: 2                      Calculated: 2/21/2020

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Pteronarcys</i>	09020205023	0.50	0.50	0	SH	0.2	0.2
<i>Peltoperla</i>	09020206024	17.00	17.00		SH	6.1	6.1
Perlodidae	09020207	3.50	3.50		--	1.3	1.3
<i>Acroneuria</i>	09020209042		1.50	0	PR		0.5
<i>Acroneuria abnormis</i>	09020209042121	1.50		0	PR	0.5	
<i>Agnetina</i>	09020209050		0.50	2	PR		0.2
<i>Agnetina capitata</i>	09020209050152	0.50		2	PR	0.2	
<i>Boyeria</i>	09020301004		1.50	2	PR		0.5
<i>Boyeria grafiana</i>	09020301004011	1.50			--	0.5	
<i>Calopteryx</i>	09020307043	1.50	1.50	5	PR	0.5	0.5
<i>Baetis</i>	09020401001		1.50	4	CG		0.5
<i>Baetis intercalaris</i>	09020401001008	1.50			--	0.5	
<i>Acerpenna</i>	09020401007		2.50	5	CG		0.9
<i>Acerpenna macdunnoughi</i>	09020401007001	2.50			--	0.9	
<i>Plauditus</i>	09020401012	1.50	1.50		CG	0.5	0.5
<i>Maccaffertium</i>	09020402015		17.50	4	SC		6.3
<i>Maccaffertium vicarium</i>	09020402015055	17.50			--	6.3	
<i>Paraleptophlebia</i>	09020406026	4.50	4.50	1	CG	1.6	1.6
<i>Ephemerella</i>	09020410035	40.00	40.00	1	CG	14.4	14.4
<i>Dolophilodes</i>	09020601001	7.50	7.50	0	CF	2.7	2.7
<i>Polycentropus</i>	09020603010	0.50	0.50	6	PR	0.2	0.2
<i>Cheumatopsyche</i>	09020604015	9.50	9.50	5	CF	3.4	3.4
<i>Hydropsyche</i>	09020604016		90.50	4	CF		32.7
<i>Hydropsyche bronta</i>	09020604016029	1.00			--	0.4	
<i>Hydropsyche slossonae</i>	09020604016031	21.50			--	7.8	
<i>Hydropsyche sparna</i>	09020604016032	68.00			--	24.5	
<i>Glossosoma</i>	09020606020		2.50	0	SC		0.9
<i>Glossosoma intermedium</i>	09020606020066	2.50			SC	0.9	
<i>Brachycentrus</i>	09020609043		7.50	0	CF		2.7
<i>Brachycentrus appalachia</i>	09020609043096	7.50			--	2.7	
Limnephilidae	09020610	1.00	1.00		--	0.4	0.4
<i>Psilotreta</i>	09020614068	1.00	1.00	0	SC	0.4	0.4
<i>Leptocerus</i>	09020618073	0.50	0.50		--	0.2	0.2
<i>Nigronia</i>	09020701003	3.00	3.00	0	PR	1.1	1.1
Chironomidae	09021011				--		
<i>Thienemannimyia</i>	09021011020		3.00	3	PR		1.1
<i>Thienemannimyia group</i>	09021011020041	3.00			--	1.1	



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Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Tvetenia</i>	09021011065		12.50	5	CG		4.5
<i>Tvetenia paucunca</i>	09021011065114	12.50			--	4.5	
<i>Rheotanytarsus</i>	09021011072	0.50	0.50	6	CF	0.2	0.2
<i>Tanytarsus</i>	09021011076	3.50	3.50	6	CF	1.3	1.3
<i>Phaenopsectra</i>	09021011101	0.50	0.50	7	SC	0.2	0.2
<i>Polypedilum</i>	09021011102		32.00	6	SH		11.6
<i>Polypedilum aviceps</i>	09021011102181	31.00			--	11.2	
<i>Polypedilum illinoense group</i>	09021011102185	1.00			--	0.4	
<i>Simulium</i>	09021012047	6.00	6.00	4	CF	2.2	2.2
<i>Promoresia</i>	09021113069	1.50	1.50		--	0.5	0.5
<i>Ferrissia</i>	10010204035	0.50	0.50		SC	0.2	0.2