



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

**Station Information**

<b>Station Number:</b> S-1155	River Basin: Androscoggin
Waterbody: East Branch Nezinscot River - Station 1155	HUC8 Name: Lower Androscoggin
Town: Peru	Latitude: 44 25 33.38 N
Directions: DOWNSTREAM OF GREENWOOD ROAD	Longitude: 70 25 23.2 W
	Stream Order: 1

**Sample Information**

<b>Log Number:</b> 2760	Type of Sample: ROCK BAG	Date Deployed: 7/25/2019
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/26/2019

**Classification Attainment**

<b>Statutory Class:</b> A	<b>Final Determination:</b> A	Date: 1/4/2021
Model Result with $P \geq 0.6$ : B	<b>Reason for Determination: Best Professional Judgement</b>	
Date Last Calculated: 12/23/2020	Comments: Indeterminate Class A raised to Class A because of sensitive taxa present	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.34	Class A, B, or C	1.00
Class B	0.58	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.98	Class A	0.48
Class C or Non-Attainment	0.02	Class B or C or Non-Attainment	0.52

**Model Variables**

01 Total Mean Abundance	289.67	18 Relative Abundance Ephemeroptera	0.18
02 Generic Richness	50.00	19 EPT Generic Richness	18.00
03 Plecoptera Mean Abundance	2.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	10.00
04 Ephemeroptera Mean Abundance	52.67	23 Relative Generic Richness- Plecoptera	0.06
05 Shannon-Wiener Generic Diversity	3.78	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	17.67
06 Hilsenhoff Biotic Index	5.27	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	46.00
07 Relative Abundance - Chironomidae	0.65	28 EP Generic Richness/14	0.71
08 Relative Generic Richness Diptera	0.46	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	9.33		
11 <i>Cheumatopsyche</i> Abundance	10.33		
12 EPT Generic Richness/ Diptera Generic Richness	0.78		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	1.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	9.67		
17 Chironomini Abundance (Family Functional Group)	75.67		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Polypedilum</i>	25.55
2	<i>Maccaffertium</i>	15.54
3	<i>Paratanytarsus</i>	14.50
4	<i>Rheotanytarsus</i>	10.59
5	<i>Cheumatopsyche</i>	3.57



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

**Station Number: S-1155**      Town: Peru      Date Deployed: 7/25/2019  
**Log Number: 2760**      Waterbody: East Branch Nezinscot River - Station 1155      Date Retrieved: 8/26/2019

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: MICHAEL COLE

**Waterbody Information - Deployment**

Temperature: 18.2 deg C  
Dissolved Oxygen: 6.54 mg/l  
Dissolved Oxygen Saturation: 69 %  
Specific Conductance: 27.3 uS/cm  
Velocity: 12.2 cm/s  
pH: 6.15  
Wetted Width: 5.6 m  
Bankfull Width: 7 m  
Depth: 21 cm

**Waterbody Information - Retrieval**

Temperature: 15.1 deg C  
Dissolved Oxygen: 7.52 mg/l  
Dissolved Oxygen Saturation: 73.9 %  
Specific Conductance: 29.5 uS/cm  
Velocity: 18.3 cm/s  
pH: 6.3  
Wetted Width: 5 m  
Bankfull Width: 7 m  
Depth: 18 cm

**Water Chemistry - 6/25/2019**

Nitrate + Nitrite As Nitrogen	0.01 mg/l	Nitrate As Nitrogen	0.01 mg/l
Nitrite As Nitrogen	<0.01 mg/l	Orthophosphate As Phosphorus	1 ug/l
Total Alkalinity	5 mg/l	Total Kjeldahl Nitrogen (organic A	0.3 mg/l
Total Phosphorus Mixed Forms (po	15 ug/l		

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Conifer	Dense	Rolling	
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Below Road Crossing	Boulder	5 %
	Minimally Disturbed	Gravel	5 %
		Rubble/Cobble	40 %
		Sand	50 %

**Landcover Summary - 2004 Data**

**Sample Comments**

BLACKNOSE DACE PRESENT.



**Maine Department of Environmental Protection  
Biological Monitoring Program  
Aquatic Life Taxonomic Inventory Report**

**Station Number: S-1155**

Waterbody: East Branch Nezinscot River - Station 1155 Town: Peru

**Log Number: 2760**

Subsample Factor: X1

Replicates: 3

Calculated: 12/23/2020

Taxon	Maine Taxonomic Code	Count		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		(Mean of Samplers)				Actual	Adjusted
		Actual	Adjusted				
Glossiphoniidae	08030101	1.33	1.33		--	0.5	0.5
<i>Hyalella</i>	09010203006	0.33	0.33	8	CG	0.1	0.1
<i>Paracapnia</i>	09020203018	0.33	0.33	1	SH	0.1	0.1
<i>Leuctra</i>	09020204020	1.33	1.33	0	SH	0.5	0.5
<i>Acroneuria</i>	09020209042		1.00	0	PR		0.3
<i>Acroneuria lycorias</i>	09020209042125	1.00			--	0.3	
<i>Boyeria</i>	09020301004	2.33	3.33	2	PR	0.8	1.2
<i>Boyeria vinosa</i>	09020301004012	1.00			--	0.3	
Calopterygidae	09020307	1.67	1.67		--	0.6	0.6
<i>Centropetium</i>	09020401003	0.33	0.33	2	CG	0.1	0.1
<i>Acerpenna</i>	09020401007		0.33	5	CG		0.1
<i>Acerpenna macdunnoughi</i>	09020401007001	0.33			--	0.1	
<i>Labiobaetis</i>	09020401009	2.33	2.33		--	0.8	0.8
<i>Maccaffertium</i>	09020402015	35.00	45.00	4	SC	12.1	15.5
<i>Maccaffertium modestum</i>	09020402015051	3.00			--	1.0	
<i>Maccaffertium vicarium</i>	09020402015055	7.00			--	2.4	
<i>Habrophlebia</i>	09020406023		0.67		--		0.2
<i>Habrophlebia vibrans</i>	09020406023072	0.67			--	0.2	
<i>Paraleptophlebia</i>	09020406026	2.67	2.67	1	CG	0.9	0.9
<i>Eurylophella</i>	09020410036	0.67	1.33	3	CG	0.2	0.5
<i>Eurylophella funeralis</i>	09020410036115	0.67			SH	0.2	
<i>Lype</i>	09020602004		0.33	2	SC		0.1
<i>Lype diversa</i>	09020602004005	0.33			--	0.1	
<i>Cheumatopsyche</i>	09020604015	10.33	10.33	5	CF	3.6	3.6
<i>Hydropsyche</i>	09020604016	2.00	9.33	4	CF	0.7	3.2
<i>Hydropsyche sparna</i>	09020604016032	0.67			--	0.2	
<i>Hydropsyche betteni</i>	09020604016037	6.67			--	2.3	
<i>Oligostomis</i>	09020608039	0.33	0.33	2	PR	0.1	0.1
<i>Lepidostoma</i>	09020611064	0.33	0.33	1	SH	0.1	0.1
<i>Psilotreta</i>	09020614068		0.33	0	SC		0.1
<i>Psilotreta frontalis</i>	09020614068134	0.33			--	0.1	
<i>Mystacides</i>	09020618075		0.67	4	CG		0.2
<i>Mystacides sepulchralis</i>	09020618075147	0.67			--	0.2	
<i>Oecetis</i>	09020618078	3.00	3.00	8	PR	1.0	1.0
Chironomidae	09021011				--		
<i>Labrundinia</i>	09021011008		0.67	7	PR		0.2
<i>Labrundinia pilosella</i>	09021011008022	0.67			--	0.2	



**Maine Department of Environmental Protection  
Biological Monitoring Program  
Aquatic Life Taxonomic Inventory Report**

**Station Number: S-1155**      Waterbody: East Branch Nezinscot River - Station 1155      Town: Peru  
**Log Number: 2760**      Subsample Factor: X1      Replicates: 3      Calculated: 12/23/2020

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Thienemannimyia</i>	09021011020		6.67	3	PR		2.3
<i>Thienemannimyia group</i>	09021011020041	6.67			--	2.3	
<i>Trissopelopia</i>	09021011021	1.67	1.67		PR	0.6	0.6
<i>Zavrelimyia</i>	09021011022	0.67	0.67	8	PR	0.2	0.2
<i>Brillia</i>	09021011033	1.33	1.33	5	SH	0.5	0.5
<i>Eukiefferiella</i>	09021011041		1.33	8	CG		0.5
<i>Eukiefferiella brehmi group</i>	09021011041073	1.33			--	0.5	
<i>Parametriocnemus</i>	09021011053	4.00	4.00	5	CG	1.4	1.4
<i>Rheocricotopus</i>	09021011057	0.67	0.67	6	CG	0.2	0.2
<i>Thienemanniella</i>	09021011062			6	CG		
<i>Tvetenia</i>	09021011065		2.00	5	CG		0.7
<i>Tvetenia paucunca</i>	09021011065114	2.00			--	0.7	
<i>Micropsectra</i>	09021011070	10.00	10.00	7	CG	3.5	3.5
<i>Paratanytarsus</i>	09021011071	1.33	42.00	6	--	0.5	14.5
<i>Paratanytarsus longistylus</i>	09021011071126	40.67		6	--	14.0	
<i>Rheotanytarsus</i>	09021011072		30.67	6	CF		10.6
<i>Rheotanytarsus exiguus group</i>	09021011072127	12.67			CF	4.4	
<i>Rheotanytarsus pellucidus</i>	09021011072128	18.00			CF	6.2	
<i>Stempellinella</i>	09021011074	1.33	1.33	2	--	0.5	0.5
<i>Tanytarsus</i>	09021011076	7.33	7.33	6	CF	2.5	2.5
<i>Microtendipes</i>	09021011094		0.67	6	CF		0.2
<i>Microtendipes rydalensis group</i>	09021011094168	0.67			--	0.2	
<i>Phaenopsectra</i>	09021011101		0.67	7	SC		0.2
<i>Phaenopsectra obediens group</i>	09021011101180	0.67			--	0.2	
<i>Polypedilum</i>	09021011102		74.00	6	SH		25.5
<i>Polypedilum aviceps</i>	09021011102181	74.00			--	25.5	
<i>Stenochironomus</i>	09021011105	0.33	0.33	5	CG	0.1	0.1
<i>Paracricotopus</i>	09021011110	1.33	1.33		CG	0.5	0.5
<i>Simulium</i>	09021012047	5.67	5.67	4	CF	2.0	2.0
<i>Simulium venustum/verecundum complex</i>	09021012047072				CF		
<i>Atherix</i>	09021015055	0.33	0.33	2	PR	0.1	0.1
Empididae	09021016	0.33	0.33	6	--	0.1	0.1
<i>Hemerodromia</i>	09021016057	0.33	0.33	3	PR	0.1	0.1
<i>Anchytarsus</i>	09021110060		0.33		--		0.1
<i>Anchytarsus bicolor</i>	09021110060030	0.33			SH	0.1	
<i>Oulimnius</i>	09021113068		0.33		--		0.1
<i>Oulimnius latiusculus</i>	09021113068049	0.33			--	0.1	



**Maine Department of Environmental Protection  
Biological Monitoring Program  
Aquatic Life Taxonomic Inventory Report**

**Station Number: S-1155**      Waterbody: East Branch Nezinscot River - Station 1155      Town: Peru  
**Log Number: 2760**      Subsample Factor: X1      Replicates: 3      Calculated: 12/23/2020

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Promoresia</i>	09021113069		4.33		--		1.5
<i>Promoresia tardella</i>	09021113069052	4.33			--	1.5	
<i>Stenelmis</i>	09021113070	0.67	0.67	5	SC	0.2	0.2
<i>Amnicola</i>	10010104013	3.33	3.33		SC	1.2	1.2