



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

Station Information

Station Number: S-1149	River Basin:	Maine Coastal
Waterbody: Beaverdam Stream - Station 1149	HUC8 Name:	Maine Coastal
Town: Wesley	Latitude:	44 58 54.09 N
Directions: 25M UPSTREAM FROM ROAD CROSSING.	Longitude:	67 38 24.5 W
	Stream Order:	1

Sample Information

Log Number: 2764	Type of Sample: ROCK BAG	Date Deployed: 7/31/2019
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/29/2019

Classification Attainment

Statutory Class: AA	Final Determination: A	Date: 1/9/2020
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 12/20/2019	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.84	Class C	0.00
Class B	0.16	NA	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	1.00
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.00

Model Variables

01 Total Mean Abundance	395.67	18 Relative Abundance Ephemeroptera	0.10
02 Generic Richness	36.00	19 EPT Generic Richness	18.00
03 Plecoptera Mean Abundance	2.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	3.72
04 Ephemeroptera Mean Abundance	38.33	23 Relative Generic Richness- Plecoptera	0.06
05 Shannon-Wiener Generic Diversity	2.95	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	3.02
06 Hilsenhoff Biotic Index	2.43	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	32.33
07 Relative Abundance - Chironomidae	0.12	28 EP Generic Richness/14	0.50
08 Relative Generic Richness Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	74.33		
11 <i>Cheumatopsyche</i> Abundance	1.33		
12 EPT Generic Richness/ Diptera Generic Richness	1.50		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	1.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	1.69		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Dolophilodes</i>	37.83
2	<i>Hydropsyche</i>	18.79
3	<i>Simulium</i>	11.63
4	<i>Tvetenia</i>	10.25
5	<i>Maccaffertium</i>	7.75



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Station Number: S-1149 Town: Wesley Date Deployed: 7/31/2019
Log Number: 2764 Waterbody: Beaverdam Stream - Station 1149 Date Retrieved: 8/29/2019

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature: 27 deg C
Dissolved Oxygen: 7.73 mg/l
Dissolved Oxygen Saturation: 97.7 %
Specific Conductance: 30.2 uS/cm
Velocity:
pH: 6.63
Wetted Width: 5.6 m
Bankfull Width: 6.6 m
Depth: 29 cm

Waterbody Information - Retrieval

Temperature: 18.39 deg C
Dissolved Oxygen: 8.96 mg/l
Dissolved Oxygen Saturation: 95.3 %
Specific Conductance: 74.6 uS/cm
Velocity: 27.4 cm/s
pH: 6.54
Wetted Width: 5.8 m
Bankfull Width: 6.6 m
Depth: 35 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Conifer	Dense	Flat	
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Minimally Disturbed	Boulder	20 %
		Gravel	5 %
		Rubble/Cobble	70 %
		Sand	5 %

Landcover Summary - 2004 Data

Sample Comments

WATER SAMPLES COLLECTED BY SALMON UNIT - EMILY Z.



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

Station Number: S-1149 Waterbody: Beaverdam Stream - Station 1149 Town: Wesley
Log Number: 2764 Subsample Factor: X1 Replicates: 3 Calculated: 12/20/2019

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Perlodidae	09020207	0.67	0.67		--	0.2	0.2
<i>Acroneuria</i>	09020209042		1.67	0	PR		0.4
<i>Acroneuria abnormis</i>	09020209042121	1.33		0	PR	0.3	
<i>Acroneuria lycorias</i>	09020209042125	0.33			--	0.1	
<i>Boyeria</i>	09020301004		1.33	2	PR		0.3
<i>Boyeria grafiana</i>	09020301004011	0.67			--	0.2	
<i>Boyeria vinosa</i>	09020301004012	0.67			--	0.2	
Calopterygidae	09020307	0.67	0.67		--	0.2	0.2
<i>Acerpenna</i>	09020401007		0.67	5	CG		0.2
<i>Acerpenna macdunnoughi</i>	09020401007001	0.33			--	0.1	
<i>Acerpenna pygmaea</i>	09020401007011	0.33			--	0.1	
<i>Epeorus</i>	09020402009	4.00	4.00	0	SC	1.0	1.0
<i>Leucrocuta</i>	09020402011	2.00	2.00	1	SC	0.5	0.5
<i>Maccaffertium</i>	09020402015	13.67	30.67	4	SC	3.5	7.8
<i>Maccaffertium vicarium</i>	09020402015055	17.00			--	4.3	
<i>Paraleptophlebia</i>	09020406026	1.00	1.00	1	CG	0.3	0.3
<i>Dolophilodes</i>	09020601001		149.67	0	CF		37.8
<i>Dolophilodes distincta</i>	09020601001001	149.67			--	37.8	
<i>Lype</i>	09020602004		0.33	2	SC		0.1
<i>Lype diversa</i>	09020602004005	0.33			--	0.1	
<i>Cheumatopsyche</i>	09020604015	1.33	1.33	5	CF	0.3	0.3
<i>Hydropsyche</i>	09020604016	9.67	74.33	4	CF	2.4	18.8
<i>Hydropsyche slossonae</i>	09020604016031	10.67			--	2.7	
<i>Hydropsyche sparna</i>	09020604016032	23.67			--	6.0	
<i>Hydropsyche betteni</i>	09020604016037	30.33			--	7.7	
<i>Rhyacophila</i>	09020605019		3.67	2	PR		0.9
<i>Rhyacophila fuscula</i>	09020605019060	3.67			PR	0.9	
<i>Glossosoma</i>	09020606020	1.00	1.00	0	SC	0.3	0.3
<i>Hydroptila</i>	09020607026	0.33	0.33	6	P	0.1	0.1
<i>Brachycentrus</i>	09020609043		2.00	0	CF		0.5
<i>Brachycentrus appalachia</i>	09020609043096	2.00			--	0.5	
<i>Micrasema</i>	09020609044	0.33	0.33	2	SH	0.1	0.1
Limnephilidae	09020610				--		
<i>Lepidostoma</i>	09020611064	8.00	8.00	1	SH	2.0	2.0
<i>Oecetis</i>	09020618078	3.33	3.33	8	PR	0.8	0.8
<i>Nigronia</i>	09020701003		1.33	0	PR		0.3
<i>Nigronia serricornis</i>	09020701003003	1.33			--	0.3	



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		Actual	Adjusted			Actual	Adjusted
Noctuidae	09020903	0.33	0.33		--	0.1	0.1
<i>Tipula</i>	09021001002	0.67	0.67	4	SH	0.2	0.2
Chironomidae	09021011	0.67			--	0.2	
<i>Cricotopus</i>	09021011037		0.34	7	SH		0.1
<i>Cricotopus bicinctus</i>	09021011037057	0.33			--	0.1	
<i>Parametriocnemus</i>	09021011053	0.33	0.34	5	CG	0.1	0.1
<i>Tvetenia</i>	09021011065		40.56	5	CG		10.2
<i>Tvetenia paucunca</i>	09021011065114	40.00			--	10.1	
<i>Micropsectra</i>	09021011070	3.67	3.72	7	CG	0.9	0.9
<i>Rheotanytarsus</i>	09021011072		0.68	6	CF		0.2
<i>Rheotanytarsus exiguus group</i>	09021011072127	0.33			CF	0.1	
<i>Rheotanytarsus pellucidus</i>	09021011072128	0.33			CF	0.1	
<i>Tanytarsus</i>	09021011076	1.33	1.35	6	CF	0.3	0.3
<i>Polypedilum</i>	09021011102		1.35	6	SH		0.3
<i>Polypedilum aviceps</i>	09021011102181	1.33			--	0.3	
<i>Stenochironomus</i>	09021011105	0.33	0.34	5	CG	0.1	0.1
<i>Simulium</i>	09021012047	46.00	46.00	4	CF	11.6	11.6
<i>Hemerodromia</i>	09021016057	2.00	2.00	3	PR	0.5	0.5
<i>Roederiodes</i>	09021016058	8.00	8.00	3	PR	2.0	2.0
<i>Promoresia</i>	09021113069		1.00		--		0.3
<i>Promoresia tardella</i>	09021113069052	1.00			--	0.3	
<i>Stenelmis</i>	09021113070	0.67	0.67	5	SC	0.2	0.2