



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

**Station Information**

<b>Station Number:</b> S-1169	River Basin: Saco
Waterbody: Chenery Brook - Station 1169	HUC8 Name: Presumpscot
Town: Falmouth	Latitude: 43 44 24.41 N
Directions: APPAROXIMATELY 350M DOWNSTREAM OF JOHNSON ROAD. ACCESS SITE BY WALKING ON ADJACENT RAILROAD TRACKS	Longitude: 70 13 37.23 W
	Stream Order: 2

**Sample Information**

<b>Log Number:</b> 2768	Type of Sample: ROCK BAG	Date Deployed: 8/6/2019
Subsample Factor: X1	Replicates: 3	Date Retrieved: 9/3/2019

**Classification Attainment**

<b>Statutory Class:</b> B	<b>Final Determination:</b> NA	Date: 1/14/2021
Model Result with $P \geq 0.6$ : NA	<b>Reason for Determination:</b> Model	
Date Last Calculated: 1/14/2021	Comments:	

**Model Probabilities**

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

**Model Variables**

01 Total Mean Abundance	503.67	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	57.00	19 EPT Generic Richness	10.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes, Micropsectra, Parachironomus, Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	0.33	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.92	25 Sum of Abundances: <i>Cheumatopsyche, Cricotopus, Tanytarsus, Ablabesmyia</i>	23.67
06 Hilsenhoff Biotic Index	5.32	26 Sum of Abundances: <i>Acroneuria, Maccaffertium, Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.12	28 EP Generic Richness/14	0.07
08 Relative Generic Richness Diptera	0.37	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	1.33		
11 <i>Cheumatopsyche</i> Abundance	6.33		
12 EPT Generic Richness/ Diptera Generic Richness	0.48		
13 Relative Abundance - Oligochaeta	0.05		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	3.00		
17 Chironomini Abundance (Family Functional Group)	14.33		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Dubiraphia</i>	47.72
2	<i>Gammarus</i>	22.44
3	<i>Aulodrilus</i>	3.78
4	<i>Parakiefferiella</i>	3.57
5	<i>Tanytarsus</i>	3.44



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**Log Number: 2768**      Waterbody: Chenery Brook - Station 1169      Date Retrieved: 9/3/2019

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: MICHAEL COLE

**Waterbody Information - Deployment**

Temperature: 19.4 deg C  
Dissolved Oxygen: 8.97 mg/l  
Dissolved Oxygen Saturation:  
Specific Conductance: 456 uS/cm  
Velocity: 11 cm/s  
pH:  
Wetted Width: 1.8 m  
Bankfull Width: 3.7 m  
Depth: 25 cm

**Waterbody Information - Retrieval**

Temperature:  
Dissolved Oxygen:  
Dissolved Oxygen Saturation:  
Specific Conductance:  
Velocity:  
pH:  
Wetted Width: 2.6 m  
Bankfull Width: 3.9 m  
Depth: 31 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Conifer	Open	Rolling
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Urban Runoff	Below Road Crossing	Clay 90 %
		Sand 5 %
		Silt 5 %

**Landcover Summary - 2004 Data**

**Sample Comments**



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Waterbody: Chenery Brook - Station 1169

Town: Falmouth

**Log Number: 2768**

Subsample Factor: X1

Replicates: 3

Calculated: 1/14/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
DugesIIDae	03010102	1.00	1.00		--	0.2	0.2
Naididae	08020202	24.33			--	4.8	
<i>Ophidonais</i>	08020202010		3.81		CG		0.8
<i>Ophidonais serpentina</i>	08020202010001	0.33			--	0.1	
<i>Aulodrilus</i>	08020202018		19.05		--		3.8
<i>Aulodrilus limnobius</i>	08020202018002	0.67			--	0.1	
<i>Aulodrilus plurisetia</i>	08020202018004	1.00			--	0.2	
<i>Limnodrilus</i>	08020202022		3.81		CG		0.8
<i>Limnodrilus claparedianus</i>	08020202022002	0.33			--	0.1	
Lumbricidae	08020205	0.33	0.33		--	0.1	0.1
<i>Glossiphonia</i>	08030101004		0.33		--		0.1
<i>Glossiphonia elegans</i>	08030101004001	0.33			--	0.1	
<i>Placobdella</i>	08030101006	1.33	1.33		--	0.3	0.3
<i>Haemopsis</i>	08030202001	0.33	0.33		--	0.1	0.1
<i>Erpobdella</i>	08030203002		0.67		--		0.1
<i>Erpobdella punctata</i>	08030203002001	0.67			--	0.1	
<i>Caecidotea</i>	09010101001	7.00	7.00	8	SH	1.4	1.4
<i>Gammarus</i>	09010201003	113.00	113.00	4	--	22.4	22.4
<i>Boyeria</i>	09020301004	0.33	0.33	2	PR	0.1	0.1
<i>Dipheter</i>	09020401013		0.33		--		0.1
<i>Dipheter hageni</i>	09020401013001	0.33			--	0.1	
<i>Microvelia</i>	09020510025	0.33	0.33		PR	0.1	0.1
<i>Nyctiophylax</i>	09020603009	0.33	0.33	5	PR	0.1	0.1
<i>Cheumatopsyche</i>	09020604015	6.33	6.33	5	CF	1.3	1.3
<i>Hydropsyche</i>	09020604016		1.33	4	CF		0.3
<i>Hydropsyche betteni</i>	09020604016037	1.33			--	0.3	
<i>Oligostomis</i>	09020608039	0.67	0.67	2	PR	0.1	0.1
<i>Ptilostomis</i>	09020608041	0.67	0.67	5	SH	0.1	0.1
Limnephilidae	09020610	0.67	0.67		--	0.1	0.1
<i>Psilotreta</i>	09020614068	4.33	4.33	0	SC	0.9	0.9
<i>Mystacides</i>	09020618075		5.67	4	CG		1.1
<i>Mystacides sepulchralis</i>	09020618075147	5.67			--	1.1	
<i>Goera</i>	09020620063	1.33	1.33	0	SC	0.3	0.3
<i>Antocha</i>	09021001004	0.33	0.33	3	CG	0.1	0.1
<i>Hexatoma</i>	09021001008	0.33	0.33	2	PR	0.1	0.1
<i>Pilaria</i>	09021001013	0.33	0.33	7	PR	0.1	0.1
<i>Natarsia</i>	09021011011	0.33	0.33	8	PR	0.1	0.1



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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>Thienemannimyia</i>	09021011020		2.67	3	PR		0.5
<i>Thienemannimyia group</i>	09021011020041	2.67			--	0.5	
<i>Corynoneura</i>	09021011036	0.33	0.33	7	CG	0.1	0.1
<i>Nanocladius</i>	09021011049	1.33	1.33	3	CG	0.3	0.3
<i>Parakiefferiella</i>	09021011052	18.00	18.00		CG	3.6	3.6
<i>Tvetenia</i>	09021011065		1.33	5	CG		0.3
<i>Tvetenia paucunca</i>	09021011065114	1.33			--	0.3	
<i>Cladotanytarsus</i>	09021011068	1.33	1.33	7	CG	0.3	0.3
<i>Paratanytarsus</i>	09021011071	0.33	0.33	6	--	0.1	0.1
<i>Rheotanytarsus</i>	09021011072		1.33	6	CF		0.3
<i>Rheotanytarsus exiguus group</i>	09021011072127	1.33			CF	0.3	
<i>Tanytarsus</i>	09021011076	17.33	17.33	6	CF	3.4	3.4
<i>Cryptochironomus</i>	09021011082	0.33	0.33	8	PR	0.1	0.1
<i>Microtendipes</i>	09021011094		9.67	6	CF		1.9
<i>Microtendipes pedellus group</i>	09021011094166	9.67			--	1.9	
<i>Paracladopelma</i>	09021011098	0.33	0.33	7	--	0.1	0.1
<i>Paratendipes</i>	09021011100	1.00	1.00	8	CG	0.2	0.2
<i>Phaenopsectra</i>	09021011101		0.67	7	SC		0.1
<i>Phaenopsectra punctipes group</i>	09021011101181	0.67			--	0.1	
<i>Polypedilum</i>	09021011102		0.67	6	SH		0.1
<i>Polypedilum scalaenum group</i>	09021011102189	0.67			--	0.1	
<i>Stictochironomus</i>	09021011106	1.67	1.67	9	CG	0.3	0.3
Tabanidae	09021014	0.67	0.67		--	0.1	0.1
<i>Ancyronyx</i>	09021113063		2.33	6	--		0.5
<i>Ancyronyx variegatus</i>	09021113063034	2.33			CG	0.5	
<i>Dubiraphia</i>	09021113064	240.33	240.33	6	--	47.7	47.7
<i>Macronychus</i>	09021113065		6.67	4	--		1.3
<i>Macronychus glabratus</i>	09021113065040	6.67			--	1.3	
<i>Optioservus</i>	09021113067		1.00	3	SC		0.2
<i>Optioservus fastiditus</i>	09021113067044	1.00			--	0.2	
<i>Optioservus tardella</i>	09021113067052	2.00			--	0.4	
<i>Promoesia</i>	09021113069		2.00		--		0.4
<i>Stenelmis</i>	09021113070	2.00	2.00	5	SC	0.4	0.4
Acariformes	090301	4.33	4.33		--	0.9	0.9
Lymnaeidae	10010201	0.67	0.67		--	0.1	0.1
<i>Physella</i>	10010202027	3.33	3.33		SC	0.7	0.7
<i>Helisoma</i>	10010203030		2.67		SC		0.5
<i>Helisoma anceps</i>	10010203030058	2.67			--	0.5	



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<i>Ferrissia</i>	10010204035	1.00	1.00		SC	0.2	0.2
Sphaeriidae	10020201	1.00			CF	0.2	
<i>Musculium</i>	10020201001	0.33	0.44		CF	0.1	0.1
<i>Pisidium</i>	10020201002	2.67	3.56		CF	0.5	0.7