



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

**Station Information**

<b>Station Number:</b> S-1065	River Basin: Saco
Waterbody: Goosefare Brook - Station 1065	HUC8 Name: Presumpscot
Town: Saco	Latitude: 43 31 5.7 N
Directions: 46M BELOW ROSS ROAD CROSSING	Longitude: 70 25 6.92 W
	Stream Order: 2

**Sample Information**

<b>Log Number:</b> 2388	Type of Sample: ROCK BAG	Date Deployed: 7/23/2015
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/20/2015

**Classification Attainment**

<b>Statutory Class:</b> B	<b>Final Determination:</b> C	Date: 6/8/2016
Model Result with $P \geq 0.6$ : C	<b>Reason for Determination:</b> Model	
Date Last Calculated: 6/8/2016	Comments:	

**Model Probabilities**

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.01	Class C	0.77
Class B	0.20	NA	0.03
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B		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	722.67	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	43.00	19 EPT Generic Richness	7.00
03 Plecoptera Mean Abundance	1.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	1.33	23 Relative Generic Richness- Plecoptera	0.02
05 Shannon-Wiener Generic Diversity	3.99	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	171.35
06 Hilsenhoff Biotic Index	6.56	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.73	28 EP Generic Richness/14	0.14
08 Relative Generic Richness Diptera	0.53	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	36.00		
12 EPT Generic Richness/ Diptera Generic Richness	0.30		
13 Relative Abundance - Oligochaeta	0.02		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	36.18		
17 Chironomini Abundance (Family Functional Group)	277.40		

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Stictochironomus</i>	24.66
2	<i>Tanytarsus</i>	18.36
3	<i>Gammarus</i>	6.09
4	<i>Dubiraphia</i>	5.72
5	<i>Cheumatopsyche</i>	4.98



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**Log Number: 2388**      Waterbody: Goosefare Brook - Station 1065      Date Retrieved: 8/20/2015

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT      Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature: 19.6 deg C  
Dissolved Oxygen: 7.03 mg/l  
Dissolved Oxygen Saturation:  
Specific Conductance: 430.3 uS/cm  
Velocity: 6.1 cm/s  
pH: 7.15  
Wetted Width: 3.7 m  
Bankfull Width: 4.2 m  
Depth: 44 cm

**Waterbody Information - Retrieval**

Temperature: 21.4 deg C  
Dissolved Oxygen: 5.31 mg/l  
Dissolved Oxygen Saturation:  
Specific Conductance: 861 uS/cm  
Velocity: 6.1 cm/s  
pH: 6.97  
Wetted Width: 2.8 m  
Bankfull Width: 4.2 m  
Depth: 43 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Swamp Hardwood	Dense	Rolling	
Upland Conifer			
Upland Hardwood			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Below Road Crossing	Clay	40 %
		Detritus	5 %
		Gravel	5 %
		Rubble/Cobble	15 %
		Sand	35 %

**Landcover Summary - 2004 Data**

**Sample Comments**

7/23/2015: 77% DO. UNDERCUT BANKS.  
8/20/2015: EEL, FALL FISH AND WHITE SUCKER PRESENT.



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

**Station Number: S-1065**  
**Log Number: 2388**

Waterbody: Goosefare Brook - Station 1065  
Subsample Factor: X4

Town: Saco  
Calculated: 6/8/2016

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Prostoma</i>	04010101001	2.67	2.67		--	0.4	0.4
<i>Lumbriculus</i>	08020101002		8.00		CG		1.1
<i>Lumbriculus variegatus</i>	08020101002001	8.00			--	1.1	
Tubificida	080202	5.33	5.33		--	0.7	0.7
<i>Aulodrilus</i>	08020202018		4.00		--		0.6
<i>Aulodrilus plurisetia</i>	08020202018004	4.00			--	0.6	
<i>Gammarus</i>	09010201003		44.00	4	--		6.1
<i>Gammarus fasciatus</i>	09010201003003	44.00			--	6.1	
Capniidae	09020203	1.33	1.33		--	0.2	0.2
<i>Boyeria</i>	09020301004		2.67	2	PR		0.4
<i>Boyeria vinosa</i>	09020301004012	2.67			--	0.4	
<i>Gomphus</i>	09020302012	5.33	5.33	5	PR	0.7	0.7
Calopterygidae	09020307	2.67	2.67		--	0.4	0.4
<i>Calopteryx</i>	09020307043		2.67	5	PR		0.4
<i>Calopteryx maculata</i>	09020307043088	2.67			--	0.4	
Leptophlebiidae	09020406	1.33	1.33		--	0.2	0.2
Polycentropodidae	09020603	8.00	8.00		--	1.1	1.1
Hydropsychidae	09020604	6.67	6.67		--	0.9	0.9
<i>Cheumatopsyche</i>	09020604015	36.00	36.00	5	CF	5.0	5.0
<i>Oligostomis</i>	09020608039	8.00	8.00	2	PR	1.1	1.1
Limnephilidae	09020610				--		
<i>Pycnopsyche</i>	09020610049	1.33	1.33	4	SH	0.2	0.2
<i>Bezzia/palpomyia</i>	09021010043	1.33	1.33	6	PR	0.2	0.2
<i>Mallochohelea</i>	09021010047	1.33	1.33		PR	0.2	0.2
Chironomidae	09021011	2.67			--	0.4	
<i>Ablabesmyia</i>	09021011001		2.68	8	PR		0.4
<i>Ablabesmyia mallochi</i>	09021011001004	2.67			--	0.4	
<i>Conchapelopia</i>	09021011004	2.67	2.68	6	PR	0.4	0.4
<i>Natarsia</i>	09021011011		24.12	8	PR		3.3
<i>Natarsia baltimoreus</i>	09021011011026	24.00			--	3.3	
<i>Trissopelopia</i>	09021011021		2.68		PR		0.4
<i>Trissopelopia ogemawi</i>	09021011021042	2.67			--	0.4	
<i>Zavrelimyia</i>	09021011022		4.02	8	PR		0.6
<i>Zavrelimyia thryptica group</i>	09021011022045	4.00			PR	0.6	
<i>Parametriocnemus</i>	09021011053	5.33	5.36	5	CG	0.7	0.7
<i>Rheocricotopus</i>	09021011057		2.68	6	CG		0.4
<i>Rheocricotopus robacki</i>	09021011057105	2.67			--	0.4	



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		Actual	Adjusted			Actual	Adjusted
<i>Thienemanniella</i>	09021011062		1.34	6	CG		0.2
<i>Thienemanniella lobapodema</i>	09021011062114	1.33			--	0.2	
<i>Cladotanytarsus</i>	09021011068	26.67	26.80	7	CG	3.7	3.7
<i>Paratanytarsus</i>	09021011071		2.68	6	--		0.4
<i>Paratanytarsus dissimilis</i>	09021011071125	2.67			--	0.4	
<i>Rheotanytarsus</i>	09021011072		8.04	6	CF		1.1
<i>Rheotanytarsus pellucidus</i>	09021011072128	8.00			CF	1.1	
<i>Stempellinella</i>	09021011074		34.84	2	--		4.8
<i>Stempellinella leptocelloides</i>	09021011074001	32.00			--	4.4	
<i>Stempellinella fimbriata</i>	09021011074002	2.67			--	0.4	
<i>Tanytarsus</i>	09021011076	132.00	132.67	6	CF	18.3	18.4
<i>Cryptochironomus</i>	09021011082	6.67	6.70	8	PR	0.9	0.9
<i>Microtendipes</i>	09021011094		22.78	6	CF		3.2
<i>Microtendipes pedellus group</i>	09021011094166	9.33			--	1.3	
<i>Microtendipes rydalensis group</i>	09021011094168	13.33			--	1.8	
<i>Paracladopelma</i>	09021011098		1.34	7	--		0.2
<i>Paracladopelma undine</i>	09021011098177	1.33			--	0.2	
<i>Paratendipes</i>	09021011100		17.42	8	CG		2.4
<i>Paratendipes albimanus group</i>	09021011100176	17.33			--	2.4	
<i>Phaenopsectra</i>	09021011101		29.48	7	SC		4.1
<i>Phaenopsectra obediens</i>	09021011101182	29.33			SC	4.1	
<i>Polypedilum</i>	09021011102		21.44	6	SH		3.0
<i>Polypedilum scalaenum group</i>	09021011102189	21.33			--	3.0	
<i>Stictochironomus</i>	09021011106	177.33	178.23	9	CG	24.5	24.7
<i>Hemerodromia</i>	09021016057	1.33	1.33	3	PR	0.2	0.2
<i>Ancyronyx</i>	09021113063		2.67	6	--		0.4
<i>Ancyronyx variegatus</i>	09021113063034	2.67			CG	0.4	
<i>Dubiraphia</i>	09021113064	29.33	41.33	6	--	4.1	5.7
<i>Dubiraphia quadrinotata</i>	09021113064037	12.00			--	1.7	
<i>Stenelmis</i>	09021113070		1.33	5	SC		0.2
<i>Stenelmis crenata</i>	09021113070055	1.33			--	0.2	
Basommatophora	100102	1.33	1.33		--	0.2	0.2
<i>Physa</i>	10010202027	1.33	1.33		SC	0.2	0.2
<i>Helisoma</i>	10010203030		2.67		SC		0.4
<i>Helisoma anceps</i>	10010203030058	2.67			--	0.4	