



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

Station Information

**Station Number:** S-70 River Basin: Saco  
**Waterbody:** North Branch Little River - Station 70 HUC8 Name: Presumpscot  
**Town:** Standish Latitude: 43 44 24.28 N  
**Directions:** BELOW GTE; 10 M BELOW CULVERT AT SHAW Mills Crossing Longitude: 70 31 18.2 W  
Stream Order: 2

Sample Information

**Log Number:** 2355 Type of Sample: ROCK BAG Date Deployed: 7/13/2015  
**Subsample Factor:** X1 Replicates: 3 Date Retrieved: 8/10/2015

Classification Attainment

**Statutory Class:** B **Final Determination:** A Date: 12/22/2015  
**Model Result with  $P \geq 0.6$ :** A **Reason for Determination:** Model  
**Date Last Calculated:** 12/22/2015 **Comments:**

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.75	Class A, B, or C	1.00
Class B	0.24	Non-Attainment	0.00
B or Better Model		A Model	
Class A or B	1.00	Class A	0.91
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.09

Model Variables

01 Total Mean Abundance	257.00	18 Relative Abundance Ephemeroptera	0.09
02 Generic Richness	71.00	19 EPT Generic Richness	18.00
03 Plecoptera Mean Abundance	2.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	1.75
04 Ephemeroptera Mean Abundance	23.00	23 Relative Generic Richness- Plecoptera	0.01
05 Shannon-Wiener Generic Diversity	4.66	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	32.86
06 Hilsenhoff Biotic Index	5.08	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.36	28 EP Generic Richness/14	0.57
08 Relative Generic Richness Diptera	0.35	30 Presence of Class A Indicator Taxa/7	0.14
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera	0.72		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.01		
15 Perlidae Mean Abundance (Family	0.00		
Functional Group)			
16 Tanypodinae Mean Abundance	8.04		
(Family Functional Group)			
17 Chironomini Abundance (Family	25.17		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Dubiraphia</i>	16.47
2	<i>Tanytarsus</i>	11.02
3	<i>Pycnopsyche</i>	10.64
4	<i>Paratanytarsus</i>	9.52
5	<i>Microtendipes</i>	4.76



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**Station Number: S-70**

Town: Standish

Date Deployed: 7/13/2015

**Log Number: 2355**

Waterbody: North Branch Little River - Station 70

Date Retrieved: 8/10/2015

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature: 20.6 deg C  
Dissolved Oxygen: 5.92 mg/l  
Dissolved Oxygen Saturation:  
Specific Conductance: 107.8 uS/cm  
Velocity:  
pH: 6.79  
Wetted Width: 4.1 m  
Bankfull Width: 4.2 m  
Depth: 26 cm

**Waterbody Information - Retrieval**

Temperature: 18.7 deg C  
Dissolved Oxygen: 7.36 mg/l  
Dissolved Oxygen Saturation:  
Specific Conductance: 80.4 uS/cm  
Velocity:  
pH: 6.92  
Wetted Width: 4.4 m  
Bankfull Width: 6 m  
Depth: 20 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

Landuse Name  
Swamp Hardwood  
Upland Conifer  
Upland Hardwood  
Potential Stressor

Canopy Cover

Dense

Terrain

Rolling

Location

Below Road Crossing

Substrate

Boulder 10 %  
Gravel 20 %  
Rubble/Cobble 30 %  
Sand 40 %

**Landcover Summary - 2004 Data**

Total Area (ac)	2077	High Int. Dev. %	1.4	Water %	0.0	Non-vegetated %	3.2
		Med Int. Dev. %	2.3	Wetland %	2.2	Tilled Agriculture %	1.8
		Low Int. Dev. %	7.3	Upland Woody %	72.5	Grassland %	9.0
		Development %	11.0	Natural %	75.4	Human Altered %	24.6
						Impervious %	6.4

**Sample Comments**

7/13/2015: IRON AND DARK WATER PRESENT. 66.3% DO.  
8/10/2015: 70.9% DO.



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**Station Number: S-70**

Waterbody: North Branch Little River - Station 70

Town: Standish

**Log Number: 2355**

Subsample Factor: X1

Replicates: 3

Calculated: 12/22/2015

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Hydra</i>	02010101001	0.67	0.67		PR	0.3	0.3
Rhabditophora	0301	0.33	0.33		--	0.1	0.1
<i>Chaetogaster</i>	08020202002		0.33		--		0.1
<i>Chaetogaster diastrophus</i>	08020202002002	0.33			--	0.1	
<i>Nais</i>	08020202009		0.33		CG		0.1
<i>Nais communis</i>	08020202009005	0.33			--	0.1	
<i>Aulodrilus</i>	08020202018		1.33		--		0.5
<i>Aulodrilus pluriseta</i>	08020202018004	1.33			--	0.5	
<i>Aeolosoma</i>	08020301001	0.33	0.33		--	0.1	0.1
Glossiphoniidae	08030101	0.33	0.33		--	0.1	0.1
<i>Hyalella</i>	09010203006	0.67	0.67	8	CG	0.3	0.3
Isotomidae	09020102	0.67	0.67		--	0.3	0.3
<i>Leuctra</i>	09020204020		2.00	0	SH		0.8
<i>Leuctra ferruginea</i>	09020204020050	1.00			--	0.4	
<i>Leuctra tenuis</i>	09020204020056	0.33			--	0.1	
<i>Leuctra truncata</i>	09020204020058	0.67			--	0.3	
<i>Boyeria</i>	09020301004		2.00	2	PR		0.8
<i>Boyeria vinosa</i>	09020301004012	2.00			--	0.8	
Gomphidae	09020302	0.67	0.67		--	0.3	0.3
Calopterygidae	09020307	3.00	3.00		--	1.2	1.2
<i>Calopteryx</i>	09020307043		0.67	5	PR		0.3
<i>Calopteryx maculata</i>	09020307043088	0.67			--	0.3	
<i>Baetis</i>	09020401001		0.33	4	CG		0.1
<i>Baetis tricaudatus</i>	09020401001012	0.33			--	0.1	
<i>Acerpenna</i>	09020401007		2.00	5	CG		0.8
<i>Acerpenna macdunnoughi</i>	09020401007001	2.00			--	0.8	
<i>Procloeon</i>	09020401010	1.00	1.00		CG	0.4	0.4
Leptophlebiidae	09020406	8.67	8.67		--	3.4	3.4
<i>Paraleptophlebia</i>	09020406026	2.67	2.67	1	CG	1.0	1.0
<i>Ephemerella</i>	09020410035	0.67	0.67	1	CG	0.3	0.3
<i>Eurylophella</i>	09020410036	7.67	7.67	3	CG	3.0	3.0
<i>Microvelia</i>	09020510025	0.67	1.33		PR	0.3	0.5
<i>Microvelia paludicola</i>	09020510025002	0.67			--	0.3	
<i>Cernotina</i>	09020603006	0.33	0.33		PR	0.1	0.1
<i>Nyctiophylax</i>	09020603009		3.67	5	PR		1.4
<i>Nyctiophylax moestus</i>	09020603009013	3.67			--	1.4	
<i>Polycentropus</i>	09020603010	0.33	0.33	6	PR	0.1	0.1
<i>Phylocentropus</i>	09020603011	1.33	1.33	5	CF	0.5	0.5



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**Station Number: S-70**

Waterbody: North Branch Little River - Station 70

Town: Standish

**Log Number: 2355**

Subsample Factor: X1

Replicates: 3

Calculated: 12/22/2015

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Oxyethira</i>	09020607028	1.33	1.33	3	P	0.5	0.5
<i>Oligostomis</i>	09020608039	1.67	1.67	2	PR	0.6	0.6
<i>Pycnopsyche</i>	09020610049	27.33	27.33	4	SH	10.6	10.6
<i>Helicopsyche</i>	09020616070		12.00	3	SC		4.7
<i>Helicopsyche borealis</i>	09020616070137	12.00			--	4.7	
<i>Mystacides</i>	09020618075		2.00	4	CG		0.8
<i>Mystacides sepulchralis</i>	09020618075147	2.00			--	0.8	
<i>Oecetis</i>	09020618078	0.67	3.00	8	PR	0.3	1.2
<i>Oecetis persimilis</i>	09020618078157	2.33			--	0.9	
<i>Nigronia</i>	09020701003		0.67	0	PR		0.3
<i>Nigronia serricornis</i>	09020701003003	0.67			--	0.3	
<i>Sialis</i>	09020702004	0.67	0.67	4	PR	0.3	0.3
Chironomidae	09021011	4.33			--	1.7	
<i>Ablabesmyia</i>	09021011001		4.54	8	PR		1.8
<i>Ablabesmyia mallochii</i>	09021011001004	3.67			--	1.4	
<i>Ablabesmyia monilis</i>	09021011001009	0.67			--	0.3	
<i>Labrundinia</i>	09021011008			7	PR		
<i>Nilotanytus</i>	09021011012		0.35	6	PR		0.1
<i>Nilotanytus fimbriatus</i>	09021011012027	0.33			--	0.1	
<i>Paramerina</i>	09021011013		0.35		--		0.1
<i>Paramerina anomala</i>	09021011013001	0.33			--	0.1	
<i>Procladius</i>	09021011015	0.33	0.35	9	PR	0.1	0.1
<i>Trissopelopia</i>	09021011021		1.40		PR		0.5
<i>Trissopelopia ogemawi</i>	09021011021042	1.33			--	0.5	
<i>Zavrelimyia</i>	09021011022		1.05	8	PR		0.4
<i>Zavrelimyia thryptica group</i>	09021011022045	1.00			PR	0.4	
<i>Eukiefferiella</i>	09021011041		0.70	8	CG		0.3
<i>Eukiefferiella brehmi group</i>	09021011041073	0.67			--	0.3	
<i>Nanocladius</i>	09021011049	0.33	0.35	3	CG	0.1	0.1
<i>Parakiefferiella</i>	09021011052	1.00	1.05		CG	0.4	0.4
<i>Parametriocnemus</i>	09021011053	0.33	0.35	5	CG	0.1	0.1
<i>Thienemanniella</i>	09021011062	0.33	0.35	6	CG	0.1	0.1
<i>Tvetenia</i>	09021011065		0.35	5	CG		0.1
<i>Tvetenia paucunca</i>	09021011065114	0.33			--	0.1	
<i>Cladotanytarsus</i>	09021011068	0.33	0.35	7	CG	0.1	0.1
<i>Micropsectra</i>	09021011070	1.67	1.75	7	CG	0.6	0.7
<i>Paratanytarsus</i>	09021011071		24.47	6	--		9.5
<i>Paratanytarsus longistylus</i>	09021011071126	23.33		6	--	9.1	



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		Calculated: 12/22/2015

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		Actual	Adjusted			Actual	Adjusted
<i>Rheotanytarsus</i>	09021011072		1.05	6	CF		0.4
<i>Rheotanytarsus pellucidus</i>	09021011072128	1.00			CF	0.4	
<i>Stempellinella</i>	09021011074		0.35	2	--		0.1
<i>Stempellinella fimbriata</i>	09021011074002	0.33			--	0.1	
<i>Tanytarsus</i>	09021011076	21.00	28.31	6	CF	8.2	11.0
<i>Tanytarsus buckleyi</i>	09021011076139	6.00			CF	2.3	
<i>Microtendipes</i>	09021011094		12.23	6	CF		4.8
<i>Microtendipes pedellus group</i>	09021011094166	1.33			--	0.5	
<i>Microtendipes rydalensis group</i>	09021011094168	10.33			--	4.0	
<i>Nilothauma</i>	09021011095	2.67	2.80	2	--	1.0	1.1
<i>Paratendipes albimanus group</i>	09021011100176				--		
<i>Phaenopsectra</i>	09021011101		1.40	7	SC		0.5
<i>Phaenopsectra obediens</i>	09021011101182	1.33			SC	0.5	
<i>Polypedilum</i>	09021011102		8.74	6	SH		3.4
<i>Polypedilum aviceps</i>	09021011102181	4.00			--	1.6	
<i>Polypedilum scalaenum group</i>	09021011102189	3.67			--	1.4	
<i>Polypedilum albicorne</i>	09021011102195	0.67			--	0.3	
<i>Apsectrotanypus</i>	09021011109		0.70		--		0.3
<i>Apsectrotanypus johnsoni</i>	09021011109001	0.67			--	0.3	
<i>Hemerodromia</i>	09021016057	7.67	7.67	3	PR	3.0	3.0
<i>Neoplasta</i>	09021016064	0.33	0.33		PR	0.1	0.1
<i>Psephenus</i>	09021108058		1.67	4	SC		0.6
<i>Psephenus herricki</i>	09021108058028	1.67			--	0.6	
<i>Ectopria</i>	09021109059	1.33	1.33	5	SC	0.5	0.5
<i>Dubiraphia</i>	09021113064	2.67	42.33	6	--	1.0	16.5
<i>Dubiraphia quadrinotata</i>	09021113064037	39.67			--	15.4	
<i>Optioservus</i>	09021113067	0.67	0.67	3	SC	0.3	0.3
<i>Oulimnius</i>	09021113068		1.33		--		0.5
<i>Oulimnius latiusculus</i>	09021113068049	1.33			--	0.5	
<i>Promoresia</i>	09021113069		4.33		--		1.7
<i>Promoresia elegans</i>	09021113069051	1.67			--	0.6	
<i>Promoresia tardella</i>	09021113069052	2.67			--	1.0	
<i>Stenelmis</i>	09021113070	1.67	6.00	5	SC	0.6	2.3
<i>Stenelmis crenata</i>	09021113070055	4.33			--	1.7	
<i>Basommatophora</i>	100102	0.67	0.67		--	0.3	0.3
<i>Physa</i>	10010202027	0.67	0.67		SC	0.3	0.3
<i>Helisoma</i>	10010203030		0.33		SC		0.1
<i>Helisoma anceps</i>	10010203030058	0.33			--	0.1	



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<b>Log Number: 2355</b>	Subsample Factor: X1	Replicates: 3
		Calculated: 12/22/2015

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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>Ferrissia</i>	10010204035		1.00		SC		0.4
<i>Ferrissia rivularis</i>	10010204035066	1.00			--	0.4	
Sphaeriidae	10020201	3.00	3.00		CF	1.2	1.2
<i>Pisidium</i>	10020201002	0.33	0.33		CF	0.1	0.1