



Maine Department of Environmental Protection

Biological Monitoring Program

Aquatic Life Classification Attainment Report

Station Information

Station Number: S-971 Waterbody: Sucker Brook - Station 971 Town: Bangor Directions: TURN LEFT AT ARMORY FROM 1A NORTH. AT GALEN COLE LAND TRANSPORTATION MUSEUM OFF PERRY ROAD. UPSTREAM OF BRIDGE.	DEP Drainage: Penobscot HUC8: 01020005 HUC8 Name: Lower Penobscot Latitude: 44 47 7.0 N Longitude: 68 48 21.61 W Stream Order: 1
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Sample Information

Log Number: 2035	Type of Sample: ROCK BAG	Date Deployed: 7/13/2011
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/15/2011

Classification Attainment

Statutory Class: B	Final Determination: NA	Date: 2/13/2012
Model Result with P>.6: NA	Reason for Determination: Model	
Date Last Calculated: 2/10/2012	Comments:	

Model Probabilities

<u>First Stage Model</u>	<u>C or Better Model</u>
Class A 0.00 Class C 0.07	Class A, B, or C 0.00
Class B 0.00 NA 0.93	Non-Attainment 1.00
<u>B or Better Model</u>	<u>A Model</u>
Class A or B 0.00	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	119.00	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	29.00	19 EPT Generic Richness	5.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	0.00
04 Ephemeroptera Mean Abundance	0.33	<i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	
05 Shannon-Wiener Generic Diversity	3.10	23 Relative Generic Richness- Plecoptera	0.00
06 Hilsenhoff Biotic Index	5.92	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	51.16
07 Relative Abundance - Chironomidae	0.87	<i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	
08 Relative Generic Richness Diptera	0.52	26 Sum of Abundances: <i>Acroneuria</i> ,	0.00
09 <i>Hydropsyche</i> Abundance	0.00	<i>Maccaffertium</i> , <i>Stenonema</i>	
11 <i>Cheumatopsyche</i> Abundance	0.33	28 EP Generic Richness/14	0.07
12 EPT Generic Richness/ Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.00

Five Most Dominant Taxa

		Rank Taxon Name Percent
13 Relative Abundance - Oligochaeta	0.01	1 <i>Tanytarsus</i> 35.64
15 Perlidae Mean Abundance	0.00	2 <i>Microtendipes</i> 21.21
(Family Functional Group)		3 <i>Paratanytarsus</i> 12.16
16 Tanypodinae Mean Abundance	9.42	4 <i>Ablabesmyia</i> 6.51
(Family Functional Group)		5 <i>Rheotanytarsus</i> 4.81
17 Chironomini Abundance (Family	27.26	
Functional Group)		



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Waterbody: Sucker Brook - Station 971

Date Retrieved: 8/15/2011

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 20.4 deg C
Dissolved Oxygen: 8.8 mg/l
Specific Conductance: 566 uS/cm
Velocity: 8.5 cm/s
pH: 7.99
Wetted Width: 2 m
Bankfull Width: 2 m
Depth: 18 cm

Waterbody Information - Retrieval

Temperature: 19 deg C
Dissolved Oxygen: 8.8 mg/l
Specific Conductance: 709 uS/cm
Velocity: 10 cm/s
pH: 8.27
Wetted Width: 2 m
Bankfull Width: 2 m
Depth: 15 cm

Water Chemistry

Summary of Habitat Characteristics

Landuse Name

Swamp Hardwood
Upland Conifer
Urban

Canopy Cover

Open

Terrain

Rolling

Potential Stressor

Urban Runoff

Location

Below Airport
Below Road Crossing
Below Urban NPS

Substrate

Boulder 5 %
Clay 80 %
Rubble/Cobble 15 %

Landcover Summary - 2004 Data

Sample Comments

8/15/11: FISH AND AN EEL OBSERVED.

7/13/11: VELOCITY WAS VARIABLE - VISABLE AT BAG 1 LOCATION, 13 AT BAG 2, 4 AT BAG 3.

7/13/11: FISH OBSERVED, LAWN MOWED DOWN TO WATER DOWNSTREAM OF BAGS. LOCATION:
BELOW 95/395 INTERCHANGE.



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

Station Number: S-971

Waterbody: Sucker Brook - Station 971

Town: Bangor

Log Number: 2035

Subsample Factor: X1

Replicates: 3

Calculated: 2/10/2012

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Lumbricidae	08020205	0.67	0.67		--	0.6	0.6
<i>Aeshna</i>	09020301001		1.00	5	PR		0.8
<i>Aeshna umbrosa</i>	09020301001006	1.00			--	0.8	
<i>Boyeria</i>	09020301004		0.33	2	PR		0.3
<i>Boyeria vinosa</i>	09020301004012	0.33			--	0.3	
<i>Centropetium</i>	09020401003	0.33	0.33	2	CG	0.3	0.3
<i>Cheumatopsyche</i>	09020604015	0.33	0.33	5	CF	0.3	0.3
<i>Hydroptila</i>	09020607026	0.33	0.33	6	P	0.3	0.3
<i>Ptilostomis</i>	09020608041	1.00	1.00	5	SH	0.8	0.8
<i>Frenesia</i>	09020610058		1.33	0	SH		1.1
<i>Frenesia difficilis</i>	09020610058117	1.33			--	1.1	
<i>Tipula</i>	09021001002	0.33	0.33	4	SH	0.3	0.3
<i>Antocha</i>	09021001004	0.33	0.33	3	CG	0.3	0.3
Chironomidae	09021011	1.00			--	0.8	
<i>Ablabesmyia</i>	09021011001		7.74	8	PR		6.5
<i>Ablabesmyia mallochii</i>	09021011001004	7.67			--	6.4	
<i>Conchapelopia</i>	09021011004	0.67	0.67	6	PR	0.6	0.6
<i>Natarsia</i>	09021011011		0.34	8	PR		0.3
<i>Natarsia baltimorea</i>	09021011011026	0.33			--	0.3	
<i>Paramerina</i>	09021011013	0.67	0.67		--	0.6	0.6
<i>Pagastia</i>	09021011025		2.36	1	--		2.0
<i>Pagastia orthogonia</i>	09021011025001	2.33			--	2.0	
<i>Cricotopus</i>	09021011037		0.67	7	SH		0.6
<i>Cricotopus bicinctus</i>	09021011037057	0.33			--	0.3	
<i>Cricotopus triannulatus/infuscatus</i>	09021011037078	0.33			SH	0.3	
<i>Parametriocnemus</i>	09021011053	0.67	0.67	5	CG	0.6	0.6
<i>Paratanytarsus</i>	09021011071	14.33	14.47	6	--	12.0	12.2
<i>Rheotanytarsus</i>	09021011072	5.67	5.72	6	CF	4.8	4.8
<i>Tanytarsus</i>	09021011076	42.00	42.41	6	CF	35.3	35.6
<i>Microtendipes</i>	09021011094		25.25	6	CF		21.2
<i>Microtendipes pedellus group</i>	09021011094166	25.00			--	21.0	
<i>Phaenopsectra</i>	09021011101	0.33	2.02	7	SC	0.3	1.7
<i>Phaenopsectra obediens</i>	09021011101182	1.67			SC	1.4	
<i>Neoplasta</i>	09021016064	0.33	0.33		PR	0.3	0.3
<i>Paracymus</i>	09021105049	0.33	0.33		--	0.3	0.3
<i>Dubiraphia</i>	09021113064	2.33	2.33	6	--	2.0	2.0
Basommatophora	100102	0.67	0.67		--	0.6	0.6
<i>Lymnaea</i>	10010201022		0.33		SC		0.3



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<i>Lymnaea columella</i>	10010201022038	0.33			--	0.3	
<i>Physa</i>	10010202026		5.00		SC		4.2
<i>Physa gyrina</i>	10010202026046	5.00			--	4.2	
<i>Gyraulus</i>	10010203029		0.67		SC		0.6
<i>Gyraulus parvus</i>	10010203029057	0.67			--	0.6	
<i>Helisoma</i>	10010203030		0.33		SC		0.3
<i>Helisoma anceps</i>	10010203030058	0.33			--	0.3	