



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

Station Information

Station Number:	S-933	DEP Drainage:	Piscataqua - Presumpscot - Saco
Waterbody:	Capisic Brook - Unnamed Tributary - Station 933	HUC8:	
Town:	Portland	HUC8 Name:	
Directions:	NEAR FRED HILL SCHOOL, ~100 FEET BELOW CULVERT	Latitude:	43 40 46.99 N
		Longitude:	70 19 2.06 W
		Stream Order:	1

Sample Information

Log Number:	1837	Type of Sample:	ROCK BAG	Date Deployed:	7/15/2009
Subsample Factor:	X1	Replicates:	2	Date Retrieved:	8/11/2009

Classification Attainment

Statutory Class:	C	Final Determination:	NA	Date:	5/26/2010
Model Result with P>.6:	I	Reason for Determination:	Best Professional Judgement		
Date Last Calculated:	5/26/2010	Comments:	Minimum Provision for Generic Richness not met. Community exhibiting a toxic response.		

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.00	Class C	0.00	Class A, B, or C	0.00
Class B	0.00	NA	1.00	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	194.50	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	14.00	19 EPT Generic Richness	1.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	1.16	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	0.50
06 Hilsenhoff Biotic Index	3.90	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.02	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.36	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera	0.20		

Five Most Dominant Taxa

13 Relative Abundance - Oligochaeta	0.05	Rank	Taxon Name	Percent
15 Perlidae Mean Abundance	0.00	1	<i>Gammarus</i>	82.78
(Family Functional Group)		2	<i>Physa</i>	5.91
16 Tanypodinae Mean Abundance	0.00	3	<i>Frenesia</i>	3.08
(Family Functional Group)		4	<i>Stylodrilus</i>	2.31
17 Chironomini Abundance (Family	2.00	5	<i>Aulodrilus</i>	1.85
Functional Group)				



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Station Number: S-933

Town: Portland

Date Deployed: 7/15/2009

Log Number: 1837

Waterbody: Capisic Brook - Unnamed Tributary - St

Date Retrieved: 8/11/2009

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 16.1 deg C
Dissolved Oxygen: 8.76 mg/l
Specific Conductance: 1031 uS/cm
Velocity: 11.3 cm/s
pH:
Wetted Width: 1.5 m
Bankfull Width: 3.7 m
Depth: 25 cm

Waterbody Information - Retrieval

Temperature: 19.7 deg C
Dissolved Oxygen: 7.26 mg/l
Specific Conductance: 1260 uS/cm
Velocity: 15 cm/s
pH:
Wetted Width: 1.8 m
Bankfull Width: 3.7 m
Depth: 15 cm

Water Chemistry - 8/11/2009

Ammonia As Nitrogen 0.52 mg/l
Nitrate+nitrite As N 0.62 mg/l
Total Suspended Solids 8 mg/l
Total Dissolved Solids 820 mg/l

Soluble Reactive Phosphorus 6 ug/l
Total Kjeldahl Nitrogen 1.3 mg/l
Dissolved Organic Carbon 15 mg/l

Summary of Habitat Characteristics

Landuse Name

Upland Hardwood
Urban

Canopy Cover

Partly Open

Terrain

Flat

Potential Stressor

Urban Runoff

Location

Substrate

Detritus 3 %
Gravel 5 %
Rubble/Cobble 5 %
Sand 80 %
Silt 7 %

Landcover Summary - 2004 Data

Sample Comments

POOR HABITAT QUALITY.



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-933 Waterbody: Capisic Brook - Unnamed Tributary - Station: Portland Town: Portland
Log Number: 1837 Subsample Factor: X1 Replicates: 2 Calculated: 5/26/2010

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Stylodrilus</i>	08020101004		4.50		--		2.3
<i>Stylodrilus heringianus</i>	08020101004001	4.50			--	2.3	
Naididae	08020202	2.00			--	1.0	
<i>Aulodrilus</i>	08020202018		3.60		--		1.9
<i>Aulodrilus limnobius</i>	08020202018002	0.50			--	0.3	
<i>Aulodrilus pluriset</i>	08020202018004	1.50			--	0.8	
<i>Limnodrilus</i>	08020202022		0.90		CG		0.5
<i>Limnodrilus udekemianus</i>	08020202022006	0.50			--	0.3	
Erpobdellidae	08030203	1.00	1.00		--	0.5	0.5
<i>Erpobdella</i>	08030203002		0.50		--		0.3
<i>Erpobdella punctata</i>	08030203002001	0.50			--	0.3	
<i>Gammarus</i>	09010201003		161.00	4	--		82.8
<i>Gammarus fasciatus</i>	09010201003003	161.00			--	82.8	
<i>Frenesia</i>	09020610058		6.00	0	SH		3.1
<i>Frenesia difficilis</i>	09020610058117	6.00			--	3.1	
<i>Parakiefferiella</i>	09021011052	0.50	0.50		CG	0.3	0.3
<i>Tanytarsus</i>	09021011076	0.50	0.50	6	CF	0.3	0.3
<i>Paratendipes</i>	09021011100		0.50	8	CG		0.3
<i>Paratendipes albimanus group</i>	09021011100176	0.50			--	0.3	
<i>Phaenopsectra</i>	09021011101		1.00	7	SC		0.5
<i>Phaenopsectra obediens</i>	09021011101182	1.00			SC	0.5	
<i>Polypedilum</i>	09021011102		0.50	6	SH		0.3
<i>Polypedilum scalaenum group</i>	09021011102189	0.50			--	0.3	
<i>Physa</i>	10010202026	11.50	11.50		SC	5.9	5.9
<i>Pisidium</i>	10020201002	2.50	2.50		CF	1.3	1.3