



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

Station Information

Station Number: S-72
Waterbody: Presumpscot River - Station 72
Town: Westbrook
Directions: 3.2 KM BELOW S D WARREN CO.; JUST ABOVE RT. 302 (RIVERTON) BRIDGE

DEP Drainage: Piscataqua - Presumpscot - Saco
HUC8: 01060001
HUC8 Name: Presumpscot
Latitude: 43 42 8.59 N
Longitude: 70 19 32.53 W
Stream Order: 4

Sample Information

Log Number: 1929 Type of Sample: CONE Date Deployed: 7/13/2010
Subsample Factor: X4 Replicates: 3 Date Retrieved: 8/16/2010

Classification Attainment

Statutory Class: C **Final Determination: C** Date: 3/7/2011
Model Result with P>.6: C **Reason for Determination: Model**
Date Last Calculated: 3/4/2011 Comments: Low Class C (.66)

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.00	Class A, B, or C	0.66
Class B	0.02	Non-Attainment	0.34
B or Better Model		A Model	
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	944.00	18 Relative Abundance Ephemeroptera	0.04
02 Generic Richness	30.00	19 EPT Generic Richness	10.00
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	37.33	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	1.73	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	718.49
06 Hilsenhoff Biotic Index	4.84	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	26.18
07 Relative Abundance - Chironomidae	0.03	28 EP Generic Richness/14	0.21
08 Relative Generic Richness Diptera	0.37	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	2.79		
11 <i>Cheumatopsyche</i> Abundance	703.82		
12 EPT Generic Richness/ Diptera Generic Richness	0.91		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	9.33		
17 Chironomini Abundance (Family Functional Group)	5.33		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Cheumatopsyche</i>	74.56
2	<i>Chimarra</i>	8.47
3	<i>Amnicola</i>	3.39
4	<i>Maccaffertium</i>	2.77
5	<i>Neureclipsis</i>	1.27
6	<i>Oecetis</i>	1.27



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Date Retrieved: 8/16/2010

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 26.8 deg C
Dissolved Oxygen: 8.2 mg/l
Specific Conductance: 68 uS/cm
Velocity: 17 cm/s
pH:
Wetted Width: 40 m
Bankfull Width: 40 m
Depth:

Waterbody Information - Retrieval

Temperature: 24.2 deg C
Dissolved Oxygen: 7.9 mg/l
Specific Conductance: 66 uS/cm
Velocity:
pH: 6.98
Wetted Width: 40 m
Bankfull Width: 40 m
Depth:

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Open	Flat
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Below Point Source	
Nutrients		
Urban Runoff		

Landcover Summary - 2004 Data

Sample Comments

7/13/2010 GREEN WATER, FISH. DEPTH NOT MEASURABLE, BUT LOOKED TO BE 2-3M
8/16/2010 GREEN WATER. GOOD FLOW VISIBLE BUT NOT MEASURABLE. D EPTH ALSO NOT MEASURABLE.



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Aquatic Life Taxonomic Inventory Report

Station Number: S-72	Waterbody: Presumpscot River - Station 72	Town: Westbrook
Log Number: 1929	Subsample Factor: X4	Replicates: 3
		Calculated: 3/4/2011

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Girardia</i>	03010102002		9.33		--		1.0
<i>Girardia tigrina</i>	03010102002001	9.33			--	1.0	
<i>Placobdella</i>	08030101006		2.67		--		0.3
<i>Placobdella phalera</i>	08030101006006	2.67			--	0.3	
<i>Stylurus</i>	09020302018		1.33	4	PR		0.1
<i>Stylurus spiniceps</i>	09020302018041	1.33			--	0.1	
<i>Argia</i>	09020309048	2.67	2.67	7	PR	0.3	0.3
Heptageniidae	09020402	6.67			--	0.7	
<i>Stenacron</i>	09020402014	8.00	9.82	7	SC	0.8	1.0
<i>Maccaffertium</i>	09020402015	17.33	26.18	4	SC	1.8	2.8
<i>Maccaffertium modestum</i>	09020402015051	4.00			--	0.4	
<i>Tricorythodes</i>	09020411038	1.33	1.33	4	CG	0.1	0.1
<i>Chimarra</i>	09020601003	80.00	80.00	2	CF	8.5	8.5
<i>Neureclipsis</i>	09020603008	12.00	12.00	7	CF	1.3	1.3
<i>Polycentropus</i>	09020603010	8.00	8.00	6	PR	0.8	0.8
Hydropsychidae	09020604	30.67			--	3.2	
<i>Cheumatopsyche</i>	09020604015	673.33	703.82	5	CF	71.3	74.6
<i>Hydropsyche</i>	09020604016		2.79	4	CF		0.3
<i>Hydropsyche placoda</i>	09020604016059	2.67			--	0.3	
<i>Macrostemum</i>	09020604018		1.39	3	CF		0.1
<i>Macrostemum zebratum</i>	09020604018054	1.33			--	0.1	
<i>Oecetis</i>	09020618078	5.33	12.00	8	PR	0.6	1.3
<i>Oecetis persimilis</i>	09020618078157	6.67			--	0.7	
<i>Ablabesmyia</i>	09021011001		5.33	8	PR		0.6
<i>Ablabesmyia mallochii</i>	09021011001004	1.33			--	0.1	
<i>Ablabesmyia monilis</i>	09021011001009	4.00			--	0.4	
<i>Pentaneura</i>	09021011014		4.00	6	PR		0.4
<i>Pentaneura inconspicua</i>	09021011014028	4.00			--	0.4	
<i>Cricotopus</i>	09021011037		1.33	7	SH		0.1
<i>Cricotopus bicinctus</i>	09021011037057	1.33			--	0.1	
<i>Nanocladius</i>	09021011049	1.33	1.33	3	CG	0.1	0.1
<i>Cladotanytarsus</i>	09021011068	1.33	1.33	7	CG	0.1	0.1
<i>Tanytarsus</i>	09021011076	8.00	8.00	6	CF	0.8	0.8
<i>Chironomus</i>	09021011080	1.33	1.33	10	CG	0.1	0.1
<i>Cryptochironomus</i>	09021011082	1.33	1.33	8	PR	0.1	0.1
<i>Polypedilum</i>	09021011102		2.67	6	SH		0.3
<i>Polypedilum ontario</i>	09021011102194	2.67			--	0.3	
<i>Saetheria</i>	09021011132		1.33		--		0.1



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<i>Saetheria tylus</i>	09021011132001	1.33			--	0.1	
<i>Hemerodromia</i>	09021016057	1.33	1.33	3	PR	0.1	0.1
<i>Dubiraphia</i>	09021113064	1.33	1.33	6	--	0.1	0.1
<i>Stenelmis</i>	09021113070		1.33	5	SC		0.1
<i>Stenelmis crenata</i>	09021113070055	1.33			--	0.1	
<i>Amnicola</i>	10010104013		32.00		SC		3.4
<i>Amnicola limosa</i>	10010104013018	32.00			--	3.4	
<i>Physa</i>	10010202026	4.00	4.00		SC	0.4	0.4
Sphaeriidae	10020201	2.67	2.67		CF	0.3	0.3