



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

Station Information

Station Number:	S-513	DEP Drainage:	Penobscot
Waterbody:	Penjawoc Stream - Station 513	HUC8:	01020005
Town:	Bangor	HUC8 Name:	Lower Penobscot
Directions:	SATURN DEALERSHIP	Latitude:	44 49 33.95 N
		Longitude:	68 44 21.74 W
		Stream Order:	2

Sample Information

Log Number:	1055	Type of Sample:	ROCK BAG	Date Deployed:	8/3/2001
Subsample Factor:	X4	Replicates:	3	Date Retrieved:	8/31/2001

Classification Attainment

Statutory Class:	B	Final Determination:	NA	Date:	
Model Result with P>.6:	NA	Reason for Determination:	Model		
Date Last Calculated:	5/2/2007	Comments:			

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.00	Class C	0.60	Class A, B, or C	0.01
Class B	0.01	NA	0.40	Non-Attainment	0.99
<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	364.00	18 Relative Abundance Ephemeroptera	0.02
02 Generic Richness	37.00	19 EPT Generic Richness	6.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	1.43
04 Ephemeroptera Mean Abundance	6.67	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	2.91	25 Sum of Abundances: <i>Cheumatopsyche</i> <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	15.64
06 Hilsenhoff Biotic Index	5.67	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.16	28 EP Generic Richness/14	0.14
08 Relative Generic Richness Diptera	0.38	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	1.33		
12 EPT Generic Richness/ Diptera	0.43		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.03		
15 Perlidae Mean Abundance	0.00		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	22.89		
(Family Functional Group)			
17 Chironomini Abundance (Family	12.88		
Functional Group)			

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Stagnicola</i>	57.51
2	<i>Conchapelopia</i>	5.50
3	<i>Stenelmis</i>	4.76
4	<i>Tanytarsus</i>	3.93
5	<i>Dubiraphia</i>	3.30



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Station Number: S-513

Town: Bangor

Date Deployed: 8/3/2001

Log Number: 1055

Waterbody: Penjajawoc Stream - Station 513

Date Retrieved: 8/31/2001

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 27.4 deg C
Dissolved Oxygen: 8.5 mg/l
Specific Conductance: 2810 uS/cm
Velocity: 0.1 cm/s
pH:
Wetted Width: 2.4 m
Bankfull Width:
Depth: 15 cm

Waterbody Information - Retrieval

Water Chemistry - Retrieval

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Swamp Hardwood	Canopy Open	Rolling Terrain
Urban		

<u>Stressor</u>	<u>Location</u>	<u>Substrate</u>	
	Not Designated	Boulder	25 %
		Gravel	10 %
		Rubble/Cobble	55 %
		Sand	10 %

Landcover Summary - 2004 Data

Total Area (ac)	4080	High Int. Dev. %	8.0	Water %	1.8	Non-vegetated %	0.1
Total Land (ac)	4010	Med Int. Dev. %	3.3	Wetland %	9.8	Tilled Agriculture %	6.7
		Low Int. Dev. %	3.7	Upland Woody %	53.0	Human Altered %	37.3
		Development %	14.9	Natural %	62.7	Impervious %	11.5

Sample Comments



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

Station Number: S-513

Waterbody: Penjajawoc Stream - Station 513

Town: Bangor

Log Number: 1055

Subsample Factor: X4

Replicates: 3

Calculated: 5/2/2007

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
Enchytraeidae	08020201	1.33	1.33		--	0.4	0.4
<i>Nais</i>	08020202009		4.00		CG		1.1
<i>Nais communis</i>	08020202009005	1.33			--	0.4	
<i>Nais variabilis</i>	08020202009009	2.67			--	0.7	
Tubificidae	08020203	2.67	2.67		--	0.7	0.7
<i>Limnodrilus</i>	08020203005		1.33		CG		0.4
<i>Limnodrilus hoffmeisteri</i>	08020203005003	1.33			--	0.4	
<i>Caecidotea</i>	09010101001	2.67	9.33	8	SH	0.7	2.6
<i>Caecidotea communis</i>	09010101001001	6.67			--	1.8	
<i>Boyeria</i>	09020301004	1.33	4.00	2	PR	0.4	1.1
<i>Boyeria vinosa</i>	09020301004012	2.67			--	0.7	
<i>Procloeon</i>	09020401010	4.00	4.00		CG	1.1	1.1
<i>Caenis</i>	09020412040	2.67	2.67	7	CG	0.7	0.7
<i>Cheumatopsyche</i>	09020604015	1.33	1.33	5	CF	0.4	0.4
<i>Hydroptila</i>	09020607026	2.67	2.67	6	P	0.7	0.7
Limnephilidae	09020610	1.33	1.33		--	0.4	0.4
<i>Helicopsyche</i>	09020616070		1.33	3	SC		0.4
<i>Helicopsyche borealis</i>	09020616070137	1.33			--	0.4	
<i>Nigronia</i>	09020701003		2.67	0	PR		0.7
<i>Nigronia serricornis</i>	09020701003003	2.67			--	0.7	
<i>Tipula</i>	09021001002	1.33	1.33	4	SH	0.4	0.4
Chironomidae	09021011	4.00			--	1.1	
<i>Conchapelopia</i>	09021011004	18.67	20.03	6	PR	5.1	5.5
<i>Paramerina</i>	09021011013	1.33	1.43		--	0.4	0.4
<i>Thienemannimyia</i>	09021011020	1.33	1.43	3	PR	0.4	0.4
<i>Corynoneura</i>	09021011036	2.67	2.86	7	CG	0.7	0.8
<i>Parakiefferiella</i>	09021011052	1.33	1.43		CG	0.4	0.4
<i>Thienemanniella</i>	09021011062	1.33	1.43	6	CG	0.4	0.4
<i>Micropsectra</i>	09021011070	1.33	1.43	7	CG	0.4	0.4
<i>Paratanytarsus</i>	09021011071	1.33	1.43	6	--	0.4	0.4
<i>Tanytarsus</i>	09021011076	4.00	14.31	6	CF	1.1	3.9
<i>Tanytarsus glabrescens</i>	09021011076134	9.33			--	2.6	
<i>Endochironomus</i>	09021011087		1.43	10	SH		0.4
<i>Endochironomus subtendens</i>	09021011087157	1.33			--	0.4	
<i>Microtendipes</i>	09021011094		8.59	6	CF		2.4
<i>Microtendipes pedellus-grp.</i>	09021011094166	8.00			--	2.2	
<i>Paratendipes</i>	09021011100		1.43	8	CG		0.4
<i>Paratendipes albimanus-grp.</i>	09021011100176	1.33			--	0.4	
<i>Phaenopsectra</i>	09021011101		1.43	7	SC		0.4
<i>Phaenopsectra obediens-grp.</i>	09021011101180	1.33			--	0.4	
<i>Haliphus</i>	09021101001	2.67	2.67		P	0.7	0.7
<i>Dubiraphia</i>	09021113064	12.00	12.00	6	CG	3.3	3.3



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<i>Optioservus</i>	09021113067	4.00	4.00	3	SC	1.1	1.1
<i>Stenelmis</i>	09021113070	8.00	17.33	5	SC	2.2	4.8
<i>Stenelmis crenata</i>	09021113070055	9.33			--	2.6	
<i>Amnicola</i>	10010104013		2.67		SC		0.7
<i>Amnicola limosa</i>	10010104013018	1.33			--	0.4	
<i>Amnicola grana</i>	10010104013019	1.33			--	0.4	
<i>Stagnicola</i>	10010201025	209.33	209.33		--	57.5	57.5
<i>Gyraulus</i>	10010203029		4.00		SC		1.1
<i>Gyraulus circumstriatus</i>	10010203029054	4.00			--	1.1	
<i>Ferrissia</i>	10010204035	2.67	2.67		SC	0.7	0.7
<i>Sphaeriidae</i>	10020201	1.33	1.33		CF	0.4	0.4
<i>Pisidium</i>	10020201002	9.33	9.33		CF	2.6	2.6