



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

Station Information

Station Number: S-409
Waterbody: Long Creek (blanchette Brook) - Station 409
Town: Westbrook
Directions: GOODYEAR BRANCH - 40 M UPSTREAM OF SABLE
OAKS GOLF COURSE TRIBUTARY

DEP Drainage: Piscataqua - Presumpscot - Saco
HUC8: 01060001
HUC8 Name: Presumpscot
Latitude: 43 38 53.4 N
Longitude: 70 21 0.9 W
Stream Order: 1

Sample Information

Log Number: 1943
Subsample Factor: X1
Type of Sample: ROCK BAG
Replicates: 3
Date Deployed: 7/19/2010
Date Retrieved: 8/18/2010

Classification Attainment

Statutory Class: B
Model Result with P>.6: NA
Date Last Calculated: 6/7/2011
Final Determination: NA
Reason for Determination: Model
Comments:

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.00	Class A, B, or C	0.00
Class B	0.00	Non-Attainment	1.00
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	126.33	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	35.00	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>	1.52
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.34	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	9.06
06 Hilsenhoff Biotic Index	6.34	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.27	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.37	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	0.46		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.01		
15 Perlidae Mean Abundance	0.00		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	3.15		
(Family Functional Group)			
17 Chironomini Abundance (Family	21.27		
Functional Group)			

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Dubiraphia</i>	40.63
2	<i>Paratendipes</i>	12.78
3	<i>Crangonyx</i>	10.03
4	<i>Tanytarsus</i>	5.92
5	<i>Caecidotea</i>	4.75



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Waterbody: Long Creek (blanchette Brook) - Station 409

Date Retrieved: 8/18/2010

Sample Collection and Processing Information

Sampling Organization: DEP DWM

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature: 22.1 deg C
Dissolved Oxygen: 7.29 mg/l
Specific Conductance: 857 uS/cm
Velocity: 1.3 cm/s
pH: 7.55
Wetted Width: 0.8 m
Bankfull Width: 1.65 m
Depth: 14 cm

Waterbody Information - Retrieval

Temperature: 19.7 deg C
Dissolved Oxygen: 7.28 mg/l
Specific Conductance: 963 uS/cm
Velocity: 0.5 cm/s
pH: 7.41
Wetted Width: 1.05 m
Bankfull Width: 1.8 m
Depth: 20 cm

Water Chemistry

Summary of Habitat Characteristics

Landuse Name

Upland Hardwood
Urban

Canopy Cover

Partly Open

Terrain

Flat

Potential Stressor

Nps Pollution
Urban Runoff

Location

Below Urban NPS

Substrate

Clay 50 %
Muck 25 %
Sand 25 %

Landcover Summary - 2004 Data

Total Area (ac)	434	High Int. Dev. %	13.9	Water %	0.0	Non-vegetated %	0.5
		Med Int. Dev. %	7.4	Wetland %	11.9	Tilled Agriculture %	1.1
		Low Int. Dev. %	10.5	Upland Woody %	29.6	Grassland %	5.9
		Development %	31.7	Natural %	41.9	Human Altered %	58.1
						Impervious %	24.0

Sample Comments

7/19/2010 LARGE AND SMALL WOODY DEBRIS IN CHANNEL.

7/19/2010 LARGE AND SMALL WOODY DEBRIS IN CHANNEL. D.O. METER: HACH OPTICAL CALIBRATED IN THE OFFICE (DOES NOT NEED TO BE CALIBRATED DAILY), PH METER: YSI 85, CALIBRATED BEFORE EACH DAY OF SAMPLING

7/19/2010 LARGE AND SMALL WOODY DEBRIS IN CHANNEL. D.O. METER: HACH OPTICAL CALIBRATED IN THE OFFICE (DOES NOT NEED TO BE CALIBRATED DAILY), PH METER: YSI 85, CALIBRATED BEFORE EACH DAY OF SAMPLING.

8/18/2010 LOW FLOW, BARELY MOVING; LOTS OF RECENT TREE BLOWDOWNS. D.O. METER: HACH OPTICAL CALIBRATED IN THE OFFICE (DOES NOT NEED TO BE CALIBRATED DAILY), PH METER: YSI 85, CALIBRATED BEFORE EACH DAY OF SAMPLING.



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

Station Number: S-409

Waterbody: Long Creek (blanchette Brook) - Station 409 Town: Westbrook

Log Number: 1943

Subsample Factor: X1

Replicates: 3

Calculated: 6/7/2011

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Nais</i>	08020202009		0.33		CG		0.3
<i>Nais communis</i>	08020202009005	0.33			--	0.3	
<i>Aulodrilus</i>	08020202018		0.33		--		0.3
<i>Aulodrilus limnobius</i>	08020202018002	0.33			--	0.3	
<i>Limnodrilus</i>	08020202022		0.33		CG		0.3
<i>Limnodrilus hoffmeisteri</i>	08020202022003	0.33			--	0.3	
<i>Glossiphonia</i>	08030101004		3.67		--		2.9
<i>Glossiphonia complanata</i>	08030101004001	3.67			--	2.9	
<i>Helobdella</i>	08030101005		0.33		--		0.3
<i>Helobdella stagnalis</i>	08030101005004	0.33			--	0.3	
<i>Erpobdella</i>	08030203002	0.67	2.67		--	0.5	2.1
<i>Erpobdella punctata</i>	08030203002001	1.00			--	0.8	
<i>Erpobdella fervida</i>	08030203002002	1.00			--	0.8	
<i>Caecidotea</i>	09010101001	4.33	6.00	8	SH	3.4	4.7
<i>Caecidotea communis</i>	09010101001001	1.67			--	1.3	
<i>Crangonyx</i>	09010202004	12.67	12.67	8	--	10.0	10.0
<i>Hyalella</i>	09010203006		1.33	8	CG		1.1
<i>Hyalella azteca</i>	09010203006011	1.33			--	1.1	
<i>Aeshna</i>	09020301001		1.33	5	PR		1.1
<i>Aeshna umbrosa</i>	09020301001006	1.33			--	1.1	
<i>Boyeria</i>	09020301004		0.33	2	PR		0.3
<i>Boyeria vinosa</i>	09020301004012	0.33			--	0.3	
<i>Calopteryx</i>	09020307043	0.33	0.33	5	PR	0.3	0.3
<i>Phylocentropus</i>	09020603011	0.33	0.33	5	CF	0.3	0.3
<i>Oligostomis</i>	09020608039	1.00	1.00	2	PR	0.8	0.8
<i>Ptilostomis</i>	09020608041	0.67	0.67	5	SH	0.5	0.5
Limnephilidae	09020610				--		
<i>Limnephilus</i>	09020610055	0.67	0.67	3	SH	0.5	0.5
<i>Frenesia</i>	09020610058		4.33	0	SH		3.4
<i>Frenesia difficilis</i>	09020610058117	4.33			--	3.4	
<i>Glyphopsyche</i>	09020610059		0.67	1	--		0.5
<i>Glyphopsyche irrorata</i>	09020610059119	0.67			--	0.5	
<i>Dicranota</i>	09021001005	0.67	0.67	3	PR	0.5	0.5
Chironomidae	09021011	5.33			--	4.2	
<i>Ablabesmyia</i>	09021011001		1.58	8	PR		1.2
<i>Ablabesmyia mallochii</i>	09021011001004	1.33			--	1.1	
<i>Conchapelopia</i>	09021011004	1.00	1.18	6	PR	0.8	0.9
<i>Procladius</i>	09021011015	0.33	0.39	9	PR	0.3	0.3



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		Actual	Adjusted			Actual	Adjusted
<i>Parakiefferiella</i>	09021011052	0.67	0.79		CG	0.5	0.6
<i>Cladotanytarsus</i>	09021011068	1.33	1.58	7	CG	1.1	1.2
<i>Micropsectra</i>	09021011070	0.33	0.39	7	CG	0.3	0.3
<i>Tanytarsus</i>	09021011076	6.33	7.48	6	CF	5.0	5.9
<i>Cryptochironomus</i>	09021011082	0.33	0.39	8	PR	0.3	0.3
<i>Dicrotendipes</i>	09021011085	0.33	0.79	8	CG	0.3	0.6
<i>Dicrotendipes neomodestus</i>	09021011085152	0.33			--	0.3	
<i>Microtendipes</i>	09021011094		2.76	6	CF		2.2
<i>Microtendipes pedellus group</i>	09021011094166	2.33			--	1.8	
<i>Paratendipes</i>	09021011100		16.15	8	CG		12.8
<i>Paratendipes albimanus group</i>	09021011100176	13.67			--	10.8	
<i>Polypedilum</i>	09021011102	0.33	1.18	6	SH	0.3	0.9
<i>Polypedilum illinoense group</i>	09021011102185	0.33			--	0.3	
<i>Polypedilum scalaenum group</i>	09021011102189	0.33			--	0.3	
<i>Dubiraphia</i>	09021113064	51.33	51.33	6	--	40.6	40.6
<i>Stenelmis</i>	09021113070	0.67	0.67	5	SC	0.5	0.5
<i>Lymnaea</i>	10010201022		1.33		SC		1.1
<i>Lymnaea columella</i>	10010201022038	1.33			--	1.1	
<i>Physa</i>	10010202026	0.33	0.33		SC	0.3	0.3