



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

Station Information

Station Number: S-601

Waterbody: Whitney Brook - Station 601

Town: Augusta

Directions: UPSTREAM OF RR BRIDGE

DEP Drainage:

HUC8: 01030003

HUC8 Name: Lower Kennebec

Latitude: 44 19 38.93 N

Longitude: 69 45 57.11 W

Stream Order: 1

Sample Information

Log Number: 2098

Type of Sample: ROCK BAG

Date Deployed: 7/11/2012

Subsample Factor: X1

Replicates: 3

Date Retrieved: 8/9/2012

Classification Attainment

Statutory Class: B

Final Determination: NA

Date: 1/16/2013

Model Result with P>.6: NA

Reason for Determination: Model

Date Last Calculated: 1/10/2013

Comments:

Model Probabilities

First Stage Model

Class A	0.00	Class C	0.23
Class B	0.00	NA	0.77

B or Better Model

Class A or B	0.00
Class C or Non-Attainment	1.00

C or Better Model

Class A, B, or C	0.00
Non-Attainment	1.00

A Model

Class A	0.01
Class B or C or Non-Attainment	0.99

Model Variables

01 Total Mean Abundance	109.67	18 Relative Abundance Ephemeroptera	0.02																					
02 Generic Richness	39.00	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>	4.19																					
04 Ephemeroptera Mean Abundance	2.00	23 Relative Generic Richness- Plecoptera	0.00																					
05 Shannon-Wiener Generic Diversity	3.39	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	1.75																					
06 Hilsenhoff Biotic Index	6.65	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00																					
07 Relative Abundance - Chironomidae	0.31	28 EP Generic Richness/14	0.14																					
08 Relative Generic Richness Diptera	0.33	30 Presence of Class A Indicator Taxa/7	0.00																					
09 <i>Hydropsyche</i> Abundance	0.00	<table><tr><th colspan="3">Five Most Dominant Taxa</th></tr><tr><th>Rank</th><th>Taxon Name</th><th>Percent</th></tr><tr><td>1</td><td><i>Caecidotea</i></td><td>41.34</td></tr><tr><td>2</td><td><i>Parametriocnemus</i></td><td>10.23</td></tr><tr><td>3</td><td><i>Phaenopsectra</i></td><td>10.23</td></tr><tr><td>4</td><td><i>Dubiraphia</i></td><td>6.69</td></tr><tr><td>5</td><td><i>Mystacides</i></td><td>5.17</td></tr></table>		Five Most Dominant Taxa			Rank	Taxon Name	Percent	1	<i>Caecidotea</i>	41.34	2	<i>Parametriocnemus</i>	10.23	3	<i>Phaenopsectra</i>	10.23	4	<i>Dubiraphia</i>	6.69	5	<i>Mystacides</i>	5.17
Five Most Dominant Taxa																								
Rank	Taxon Name	Percent																						
1	<i>Caecidotea</i>	41.34																						
2	<i>Parametriocnemus</i>	10.23																						
3	<i>Phaenopsectra</i>	10.23																						
4	<i>Dubiraphia</i>	6.69																						
5	<i>Mystacides</i>	5.17																						
11 <i>Cheumatopsyche</i> Abundance	0.00																							
12 EPT Generic Richness/ Diptera	0.46																							
Generic Richness																								
13 Relative Abundance - Oligochaeta	0.03																							
15 Perlidae Mean Abundance (Family	0.00																							
Functional Group)																								
16 Tanypodinae Mean Abundance	1.05																							
(Family Functional Group)																								
17 Chironomini Abundance (Family	14.72																							
Functional Group)																								



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

<b>Station Number: S-601</b>	Town: Augusta	Date Deployed: 7/11/2012
<b>Log Number: 2098</b>	Waterbody: Whitney Brook - Station 601	Date Retrieved: 8/9/2012

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature:	18.6 deg C
Dissolved Oxygen:	8.7 mg/l
Specific Conductance:	488 uS/cm
Velocity:	7 cm/s
pH:	7.6
Wetted Width:	2.5 m
Bankfull Width:	9.5 m
Depth:	20 cm

**Waterbody Information - Retrieval**

Temperature:	19.4 deg C
Dissolved Oxygen:	7.4 mg/l
Specific Conductance:	667 uS/cm
Velocity:	
pH:	7.41
Wetted Width:	2 m
Bankfull Width:	9.5 m
Depth:	20 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

Landuse Name

Upland Hardwood  
Urban

Canopy Cover

Partly Open

Terrain

Rolling

Potential Stressor

Urban Runoff

Location

Below Urban NPS

Substrate

Boulder	70 %
Rubble/Cobble	15 %
Silt	15 %

**Landcover Summary - 2004 Data**

Total Area (ac)	1040	High Int. Dev. %	9.0	Water %	0.0	Non-vegetated %	0.0
		Med Int. Dev. %	9.0	Wetland %	0.0	Tilled Agriculture %	1.8
		Low Int. Dev. %	14.9	Upland Woody %	38.1	Grassland %	4.4
		Development %	32.8	Natural %	38.1	Human Altered %	61.9
						Impervious %	21.2

**Sample Comments**

8/9/12: VISIBLE FLOW. 8/9/12: FISH OBSERVED.

7/11/12: WATER HAS MILKY APPEARANCE. 7/11/12: ROCKS COVERED IN SILT. 7/11/12: ERODED BANKS, WIDENED STREAM.



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

<b>Station Number: S-601</b>	Waterbody: Whitney Brook - Station 601	Town: Augusta
<b>Log Number: 2098</b>	Subsample Factor: X1	Replicates: 3
		Calculated: 1/10/2013

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Hydra</i>	02010101001	1.33	1.33		PR	1.2	1.2
Enchytraeidae	08020201	0.33	0.33		--	0.3	0.3
<i>Chaetogaster</i>	08020202002		0.67		--		0.6
<i>Chaetogaster diastrophus</i>	08020202002002	0.67			--	0.6	
<i>Nais</i>	08020202009	0.33	1.00		CG	0.3	0.9
<i>Nais communis</i>	08020202009005	0.67			--	0.6	
Lumbricidae	08020205	1.00	1.00		--	0.9	0.9
<i>Glossiphonia</i>	08030101004		0.67		--		0.6
<i>Glossiphonia complanata</i>	08030101004001	0.67			--	0.6	
<i>Helobdella</i>	08030101005		0.33		--		0.3
<i>Helobdella stagnalis</i>	08030101005004	0.33			--	0.3	
<i>Erpobdella</i>	08030203002		0.33		--		0.3
<i>Erpobdella punctata</i>	08030203002001	0.33			--	0.3	
<i>Caecidotea</i>	09010101001	31.67	45.33	8	SH	28.9	41.3
<i>Caecidotea racovitzai racovitzai</i>	09010101001002	13.67			--	12.5	
Entomobryidae	09020103	0.33	0.33		--	0.3	0.3
<i>Aeshna</i>	09020301001		0.33	5	PR		0.3
<i>Aeshna umbrosa</i>	09020301001006	0.33			--	0.3	
<i>Boyeria</i>	09020301004		1.67	2	PR		1.5
<i>Boyeria vinosa</i>	09020301004012	1.67			--	1.5	
Calopterygidae	09020307	0.33	0.33		--	0.3	0.3
Baetidae	09020401	0.33	0.33		--	0.3	0.3
Leptophlebiidae	09020406	1.67	1.67		--	1.5	1.5
<i>Gerris</i>	09020506017	0.33	0.33		PR	0.3	0.3
Philopotamidae	09020601				--		
<i>Diplectrona</i>	09020604014		0.67	0	CF		0.6
<i>Diplectrona modesta</i>	09020604014025	0.67			--	0.6	
<i>Hydropsyche</i>	09020604016			4	CF		
<i>Pycnopsyche</i>	09020610049	0.33	0.33	4	SH	0.3	0.3
<i>Lepidostoma</i>	09020611064	0.33	0.33	1	SH	0.3	0.3
<i>Mystacides</i>	09020618075		5.67	4	CG		5.2
<i>Mystacides sepulchralis</i>	09020618075147	5.67			--	5.2	
<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	1.67			--	1.5	
<i>Nilotanyus</i>	09021011012		0.70	6	PR		0.6
<i>Nilotanyus fimbriatus</i>	09021011012027	0.67			--	0.6	
<i>Paramerina</i>	09021011013	0.33	0.35		--	0.3	0.3



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

**Station Number: S-601**      Waterbody: Whitney Brook - Station 601      Town: Augusta  
**Log Number: 2098**      Subsample Factor: X1      Replicates: 3      Calculated: 1/10/2013

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Brillia</i>	09021011033		0.70	5	SH		0.6
<i>Brillia flavifrons</i>	09021011033049	0.67			--	0.6	
<i>Corynoneura</i>	09021011036	0.33	0.35	7	CG	0.3	0.3
<i>Parametriocnemus</i>	09021011053	10.67	11.22	5	CG	9.7	10.2
<i>Micropsectra</i>	09021011070	3.67	3.86	7	CG	3.3	3.5
<i>Stempellinella</i>	09021011074		0.35	2	--		0.3
<i>Stempellinella fimbriata</i>	09021011074002	0.33			--	0.3	
<i>Tanytarsus</i>	09021011076	1.67	1.75	6	CF	1.5	1.6
<i>Microtendipes</i>	09021011094		0.35	6	CF		0.3
<i>Microtendipes pedellus group</i>	09021011094166	0.33			--	0.3	
<i>Phaenopsectra</i>	09021011101		11.22	7	SC		10.2
<i>Phaenopsectra flavipes</i>	09021011101179	1.67			SC	1.5	
<i>Phaenopsectra obediens</i>	09021011101182	9.00			SC	8.2	
<i>Polypedilum</i>	09021011102		3.15	6	SH		2.9
<i>Polypedilum aviceps</i>	09021011102181	1.00			--	0.9	
<i>Polypedilum illinoense group</i>	09021011102185	0.33			--	0.3	
<i>Polypedilum scalaenum group</i>	09021011102189	0.33			--	0.3	
<i>Polypedilum angulum</i>	09021011102198	1.33			--	1.2	
Empididae	09021016			6	--		
<i>Neoplasta</i>	09021016064				PR		
<i>Dubiraphia</i>	09021113064		7.33	6	--		6.7
<i>Dubiraphia minima</i>	09021113064036	7.33			--	6.7	
<i>Stenelmis</i>	09021113070	1.67	2.33	5	SC	1.5	2.1
<i>Stenelmis crenata</i>	09021113070055	0.67			--	0.6	
Acariformes	090301	0.33	0.33		--	0.3	0.3
<i>Fossaria</i>	10010201021	0.33	0.33		--	0.3	0.3
<i>Physa</i>	10010202026	1.00	1.00		SC	0.9	0.9
<i>Gyraulus</i>	10010203029		0.67		SC		0.6
<i>Gyraulus parvus</i>	10010203029057	0.67			--	0.6	