



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

**Station Information**

<b>Station Number:</b>	<b>S-737</b>	DEP Drainage:	Penobscot
Waterbody:	Seboeis River - Station 737	HUC8:	01020002
Town:	T06 R07 Wels	HUC8 Name:	East Branch Penobscot
Directions:	UPSTREAM OF GRAND LAKE RD, ~45M UPSTREAM OF SAWTELLE BROOK	Latitude:	46 8 39.04 N
		Longitude:	68 38 1.89 W
		Stream Order:	3

**Sample Information**

<b>Log Number:</b>	<b>2065</b>	Type of Sample:	ROCK BAG	Date Deployed:	7/28/2011
Subsample Factor:	X4	Replicates:	3	Date Retrieved:	9/21/2011

**Classification Attainment**

<b>Statutory Class:</b>	<b>AA</b>	<b>Final Determination:</b>	<b>A</b>	Date:	1/27/2012
Model Result with P>.6:	A	<b>Reason for Determination:</b>	<b>Model</b>		
Date Last Calculated:	1/24/2012	Comments:			

**Model Probabilities**

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.86	Class C	0.00	Class A, B, or C	1.00
Class B	0.14	NA	0.00	Non-Attainment	0.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B		1.00		Class A	1.00
Class C or Non-Attainment		0.00		Class B or C or Non-Attainment	0.00

**Model Variables**

01 Total Mean Abundance	798.67	18 Relative Abundance Ephemeroptera	0.21
02 Generic Richness	47.00	19 EPT Generic Richness	25.00
03 Plecoptera Mean Abundance	29.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	169.33	23 Relative Generic Richness- Plecoptera	0.09
05 Shannon-Wiener Generic Diversity	3.78	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	32.48
06 Hilsenhoff Biotic Index	2.91	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	27.27
07 Relative Abundance - Chironomidae	0.04	28 EP Generic Richness/14	0.86
08 Relative Generic Richness Diptera	0.23	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	291.87		
11 <i>Cheumatopsyche</i> Abundance	30.79		
12 EPT Generic Richness/ Diptera	2.27		
Generic Richness			
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance	20.00		
(Family Functional Group)			
16 Tanypodinae Mean Abundance	10.11		
(Family Functional Group)			
17 Chironomini Abundance (Family	6.74		
Functional Group)			

**Five Most Dominant Taxa**

Rank	Taxon Name	Percent
1	<i>Hydropsyche</i>	36.54
2	<i>Lepidostoma</i>	9.85
3	<i>Brachycentrus</i>	6.34
4	<i>Isonychia</i>	6.01
5	<i>Epeorus</i>	5.77



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Town: T06 R07 Wels

Date Deployed: 7/28/2011

**Log Number: 2065**

Waterbody: Sebobeis River - Station 737

Date Retrieved: 9/21/2011

**Sample Collection and Processing Information**

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

**Waterbody Information - Deployment**

Temperature: 21 deg C  
Dissolved Oxygen: 8.7 mg/l  
Specific Conductance: 36 uS/cm  
Velocity: 43 cm/s  
pH: 7.61  
Wetted Width: 31 m  
Bankfull Width: 32 m  
Depth: 45 cm

**Waterbody Information - Retrieval**

Temperature: 14.6 deg C  
Dissolved Oxygen: 9.2 mg/l  
Specific Conductance: 27 uS/cm  
Velocity: 70 cm/s  
pH: 7.34  
Wetted Width: 32 m  
Bankfull Width: 32 m  
Depth: 65 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

Landuse Name

Swamp Hardwood

Upland Conifer

Upland Hardwood

Canopy Cover

Open

Terrain

Hilly

Potential Stressor

Location

Above Road Crossing

Minimally Disturbed

Substrate

Boulder 10 %

Gravel 20 %

Rubble/Cobble 70 %

**Landcover Summary - 2004 Data**

Total Area (ac)	44356	High Int. Dev. %	0.0	Water %	8.9	Non-vegetated %	0.1
		Med Int. Dev. %	0.0	Wetland %	9.4	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.6	Upland Woody %	80.9	Grassland %	0.0
		Development %	0.6	Natural %	90.4	Human Altered %	0.7
						Impervious %	0.0

**Sample Comments**

7/28/11: FISH, ALGAE, AND MACROPHYTES OBSERVED. 8/28/11: HURRICANE IRENE. VISITED ON 9/1/11: ALL ROCKS UNDER WATER - TOO DEEP TO RETRIEVE BAGS. SAWTELLE BK LARGE CONTRIBUTION TO USGS GAGE AT RD CROSSING.

9/21/11: FISH, ALGAE, AND MACROPHYTES OBSERVED. RETRIEVED BAGS LATE BECAUSE OF HIGH WATER FOLLOWING HURRICANE IRENE.



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**Station Number: S-737**

Waterbody: Sebobeis River - Station 737

Town: T06 R07 Wels

**Log Number: 2065**

Subsample Factor: X4

Replicates: 3

Calculated: 1/24/2012

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Taeniopteryx</i>	09020202014	4.00	4.00	2	SH	0.5	0.5
Perlodidae	09020207	2.67	2.67		--	0.3	0.3
<i>Isoperla</i>	09020207026	2.67	2.67	2	PR	0.3	0.3
<i>Acroneuria</i>	09020209042	4.00	20.00	0	PR	0.5	2.5
<i>Acroneuria lyctorias</i>	09020209042125	16.00			--	2.0	
<i>Aeshna</i>	09020301001		1.33	5	PR		0.2
<i>Aeshna umbrosa</i>	09020301001006	1.33			--	0.2	
<i>Boyeria</i>	09020301004		1.33	2	PR		0.2
<i>Boyeria vinosa</i>	09020301004012	1.33			--	0.2	
<i>Hagenius</i>	09020302008		1.33	1	PR		0.2
<i>Hagenius brevistylus</i>	09020302008015	1.33			PR	0.2	
Corduliidae	09020305	2.67	2.67		--	0.3	0.3
<i>Neurocordulia</i>	09020305026	1.33	2.67	2	PR	0.2	0.3
<i>Neurocordulia michaeli</i>	09020305026054	1.33			--	0.2	
<i>Argia</i>	09020309048	2.67	2.67	7	PR	0.3	0.3
Baetidae	09020401	4.00			--	0.5	
<i>Baetis</i>	09020401001		9.52	4	CG		1.2
<i>Baetis brunneicolor</i>	09020401001003	5.33			--	0.7	
<i>Baetis intercalaris</i>	09020401001008	1.33			--	0.2	
<i>Plauditus</i>	09020401012	2.67	3.81		CG	0.3	0.5
Heptageniidae	09020402	24.00			--	3.0	
<i>Epeorus</i>	09020402009	25.33	46.06	0	SC	3.2	5.8
<i>Maccaffertium</i>	09020402015	2.67	7.27	4	SC	0.3	0.9
<i>Maccaffertium luteum</i>	09020402015049	1.33			--	0.2	
<i>Isonychia</i>	09020404018	48.00	48.00	2	CF	6.0	6.0
Leptophlebiidae	09020406	13.33	13.33		--	1.7	1.7
<i>Ephemera</i>	09020410035	22.67	22.67	1	CG	2.8	2.8
<i>Serratella</i>	09020410037		18.67	2	CG		2.3
<i>Serratella (Teloganopsis) deficiens</i>	09020410037121	18.67			--	2.3	
<i>Chimarra</i>	09020601003		12.00	2	CF		1.5
<i>Chimarra aterrima</i>	09020601003002	2.67			--	0.3	
<i>Chimarra obscura</i>	09020601003003	5.33			--	0.7	
<i>Chimarra socia</i>	09020601003004	4.00			--	0.5	
<i>Neureclipsis</i>	09020603008	26.67	26.67	7	CF	3.3	3.3
Hydropsychidae	09020604	1.33			--	0.2	
<i>Cheumatopsyche</i>	09020604015	30.67	30.79	5	CF	3.8	3.9
<i>Hydropsyche</i>	09020604016	46.67	291.87	4	CF	5.8	36.5
<i>Hydropsyche bronta</i>	09020604016029	4.00			--	0.5	



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**Log Number: 2065**

Subsample Factor: X4

Replicates: 3

Calculated: 1/24/2012

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Hydropsyche morosa</i>	09020604016030	94.67			--	11.9	
<i>Hydropsyche sparna</i>	09020604016032	145.33			--	18.2	
<i>Macrostemum</i>	09020604018		1.34	3	CF		0.2
<i>Macrostemum zebratum</i>	09020604018054	1.33			--	0.2	
<i>Glossosoma</i>	09020606020	9.33	9.33	0	SC	1.2	1.2
<i>Protoptila</i>	09020606022	1.33	1.33	1	SC	0.2	0.2
<i>Hydroptila</i>	09020607026	1.33	1.33	6	P	0.2	0.2
<i>Brachycentrus</i>	09020609043		50.67	0	CF		6.3
<i>Brachycentrus appalachia</i>	09020609043096	50.67			--	6.3	
<i>Lepidostoma</i>	09020611064	78.67	78.67	1	SH	9.8	9.8
<i>Helicopsyche</i>	09020616070		18.67	3	SC		2.3
<i>Helicopsyche borealis</i>	09020616070137	18.67			--	2.3	
<i>Ceraclea</i>	09020618072	1.33	1.33	3	CG	0.2	0.2
<i>Oecetis</i>	09020618078		9.33	8	PR		1.2
<i>Oecetis persimilis</i>	09020618078157	9.33			--	1.2	
Chironomidae	09021011	6.67			--	0.8	
<i>Meropelopia</i>	09021011010	1.33	1.68		--	0.2	0.2
<i>Rheopelopia</i>	09021011017		8.42		PR		1.1
<i>Rheopelopia acra group</i>	09021011017036	6.67			--	0.8	
<i>Cricotopus</i>	09021011037		1.68	7	SH		0.2
<i>Cricotopus bicinctus</i>	09021011037057	1.33			--	0.2	
<i>Nanocladius</i>	09021011049		1.68	3	CG		0.2
<i>Nanocladius downesi</i>	09021011049092	1.33			--	0.2	
<i>Orthocladius</i>	09021011050			6	CG		
<i>Thienemanniella</i>	09021011062		1.68	6	CG		0.2
<i>Thienemanniella xena</i>	09021011062110	1.33			--	0.2	
<i>Tvetenia</i>	09021011065		5.05	5	CG		0.6
<i>Tvetenia vitracies</i>	09021011065113	2.67			--	0.3	
<i>Tvetenia paucunca</i>	09021011065114	1.33			--	0.2	
<i>Rheotanytarsus</i>	09021011072	4.00	5.05	6	CF	0.5	0.6
<i>Microtendipes</i>	09021011094		5.05	6	CF		0.6
<i>Microtendipes rydalensis group</i>	09021011094168	4.00			--	0.5	
<i>Stenochironomus</i>	09021011105	1.33	1.68	5	CG	0.2	0.2
<i>Simulium</i>	09021012047	4.00	4.00	4	CF	0.5	0.5
<i>Simulium jenningsi</i>	09021012047060				--		
<i>Atherix</i>	09021015055	2.67	2.67	2	PR	0.3	0.3
<i>Dubiraphia</i>	09021113064	2.67	2.67	6	--	0.3	0.3
<i>Macronychus</i>	09021113065		1.33	4	--		0.2



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<b>Log Number: 2065</b>	Subsample Factor: X4	Replicates: 3
		Calculated: 1/24/2012

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		Actual	Adjusted			Actual	Adjusted
<i>Macronychus glabratus</i>	09021113065040	1.33			--	0.2	
<i>Optioservus</i>	09021113067	1.33	1.33	3	SC	0.2	0.2
<i>Promoresia</i>	09021113069		9.33		--		1.2
<i>Promoresia elegans</i>	09021113069051	6.67			--	0.8	
<i>Promoresia tardella</i>	09021113069052	2.67			--	0.3	
<i>Pisidium</i>	10020201002	1.33	1.33		CF	0.2	0.2