



Maine Department of Environmental Protection

Biological Monitoring Program

Aquatic Life Classification Attainment Report

Station Information

Station Number: S-737 Waterbody: Sebobeis River - Station 737 Town: T06 R07 Wels Directions: UPSTREAM OF GRAND LAKE RD, ~45M UPSTREAM OF SAWTELLE BROOK	River Basin: Penobscot HUC8 Name: East Branch Penobscot Latitude: 46 8 39.04 N Longitude: 68 38 1.89 W Stream Order: 3
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Sample Information

Log Number: 2765	Type of Sample: ROCK BAG	Date Deployed: 7/22/2019
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/19/2019

Classification Attainment

Statutory Class: AA	Final Determination: A	Date: 1/9/2020
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 1/2/2020	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.88	Class A, B, or C	1.00
Class B	0.12	Non-Attainment	0.00
		<u>A Model</u>	
<u>B or Better Model</u>		Class A	1.00
Class A or B	1.00	Class B or C or Non-Attainment	0.00
Class C or Non-Attainment	0.00		

Model Variables

01 Total Mean Abundance	169.33	18 Relative Abundance Ephemeroptera	0.38
02 Generic Richness	49.00	19 EPT Generic Richness	24.00
03 Plecoptera Mean Abundance	8.33	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	64.67	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	4.72	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	6.95
06 Hilsenhoff Biotic Index	3.97	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	21.51
07 Relative Abundance - Chironomidae	0.20	28 EP Generic Richness/14	1.14
08 Relative Generic Richness Diptera	0.27	30 Presence of Class A Indicator Taxa/7	0.29
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	1.85		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	8.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	2.04		
17 Chironomini Abundance (Family Functional Group)	21.25		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Tricorythodes</i>	11.81
2	<i>Microtendipes</i>	9.66
3	<i>Maccaffertium</i>	7.98
4	<i>Amnicola</i>	7.68
5	<i>Acroneuria</i>	4.72
6	<i>Acerpenna</i>	4.72



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	21.9 deg C
Dissolved Oxygen:	8.89 mg/l
Dissolved Oxygen Saturation:	101.4 %
Specific Conductance:	46 uS/cm
Velocity:	
pH:	7.65
Wetted Width:	29 m
Bankfull Width:	32 m
Depth:	51 cm

Waterbody Information - Retrieval

Temperature:	20.29 deg C
Dissolved Oxygen:	8.72 mg/l
Dissolved Oxygen Saturation:	97.1 %
Specific Conductance:	59.1 uS/cm
Velocity:	1.5 cm/s
pH:	7.47
Wetted Width:	25 m
Bankfull Width:	32 m
Depth:	44 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Conifer	Open	Hilly
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
	Above Road Crossing	Boulder 5 %
		Gravel 15 %
		Rubble/Cobble 80 %

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
Total Land (ac)	40394	High Int. Dev. %	0.0	Water %	N/A	Non-vegetated %	N/A
		Med Int. Dev. %	0.0	Wetland %	10.4	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.6	Upland Woody %	88.8	Grassland %	0.0
		Development %	0.6	Natural %	99.2	Human Altered %	0.8
						Impervious %	0.0

Sample Comments

CREEK CHUBS PRESENT AT SHORELINE. SPARSE AQUATIC VEGETATION DISPERSED BETWEEN COBBLE & BOULDERS.



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Aquatic Life Taxonomic Inventory Report**

Station Number: S-737	Waterbody: Sebobeis River - Station 737			Town: T06 R07 Wels			
Log Number: 2765	Subsample Factor: X1	Replicates: 3		Calculated: 1/2/2020			
Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Pteronarcys</i>	09020205023		0.33	0	SH		0.2
<i>Pteronarcys biloba</i>	09020205023061	0.33			--	0.2	
<i>Acroneuria</i>	09020209042		8.00	0	PR		4.7
<i>Acroneuria lycorias</i>	09020209042125	8.00			--	4.7	
<i>Boyeria</i>	09020301004		4.67	2	PR		2.8
<i>Boyeria grafiana</i>	09020301004011	4.33			--	2.6	
<i>Boyeria vinosa</i>	09020301004012	0.33			--	0.2	
Gomphidae	09020302	1.67	1.67		--	1.0	1.0
<i>Calopteryx</i>	09020307043	0.67	0.67	5	PR	0.4	0.4
<i>Argia</i>	09020309048	0.33	0.33	7	PR	0.2	0.2
<i>Baetis</i>	09020401001		0.33	4	CG		0.2
<i>Baetis flavistriga</i>	09020401001004	0.33			--	0.2	
<i>Acerpenna</i>	09020401007		8.00	5	CG		4.7
<i>Acerpenna macdunnoughi</i>	09020401007001	1.00			--	0.6	
<i>Acerpenna pygmaea</i>	09020401007011	7.00			--	4.1	
<i>Labiobaetis</i>	09020401009	0.33	0.33		--	0.2	0.2
<i>Proclleon</i>	09020401010	1.67	1.67		CG	1.0	1.0
<i>Plauditus</i>	09020401012	0.33	0.33		CG	0.2	0.2
<i>Iswaeon</i>	09020401015		0.67		--		0.4
<i>Iswaeon anoka</i>	09020401015001	0.67			--	0.4	
<i>Anafroptilum (Centroptilum)</i>	09020401016	1.67	1.67	2	CG	1.0	1.0
<i>Neocloeon (Centroptilum)</i>	09020401017	0.67	0.67	2	CG	0.4	0.4
Heptageniidae	09020402	0.33			--	0.2	
<i>Leucrocuta</i>	09020402011	7.00	7.09	1	SC	4.1	4.2
<i>Stenacron</i>	09020402014	4.67	4.73	7	SC	2.8	2.8
<i>Maccaffertium</i>	09020402015	4.33	13.51	4	SC	2.6	8.0
<i>Maccaffertium vicarium</i>	09020402015055	9.00			--	5.3	
<i>Paraleptophlebia</i>	09020406026	5.33	5.33	1	CG	3.1	3.1
<i>Ephemerella</i>	09020410035	0.33	0.33	1	CG	0.2	0.2
<i>Tricorythodes</i>	09020411038	20.00	20.00	4	CG	11.8	11.8
Polycentropodidae	09020603	0.67	0.67		--	0.4	0.4
<i>Neureclipsis</i>	09020603008	7.67	7.67	7	CF	4.5	4.5
Hydroptilidae	09020607				--		
<i>Oxyethira</i>	09020607028			3	P		
<i>Brachycentrus</i>	09020609043		2.67	0	CF		1.6
<i>Brachycentrus appalachia</i>	09020609043096	2.67			--	1.6	
<i>Pycnopsyche</i>	09020610049	1.33	1.33	4	SH	0.8	0.8



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Town: T06 R07 Wels

Log Number: 2765

Subsample Factor: X1

Replicates: 3

Calculated: 1/2/2020

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Lepidostoma</i>	09020611064	7.33	7.33	1	SH	4.3	4.3
<i>Helicopsyche</i>	09020616070		4.33	3	SC		2.6
<i>Helicopsyche borealis</i>	09020616070137	4.33			--	2.6	
<i>Mystacides</i>	09020618075		1.00	4	CG		0.6
<i>Mystacides sepulchralis</i>	09020618075147	1.00			--	0.6	
<i>Oecetis</i>	09020618078	0.33	0.67	8	PR	0.2	0.4
<i>Oecetis avara</i>	09020618078153	0.33			--	0.2	
Chironomidae	09021011	6.33			--	3.7	
<i>Ablabesmyia</i>	09021011001	1.33	1.63	8	PR	0.8	1.0
<i>Thienemannimyia</i>	09021011020		0.41	3	PR		0.2
<i>Thienemannimyia group</i>	09021011020041	0.33			--	0.2	
<i>Cricotopus</i>	09021011037	2.67	4.50	7	SH	1.6	2.7
<i>Cricotopus bicinctus</i>	09021011037057	1.00			--	0.6	
<i>Nanocladius</i>	09021011049	3.00	3.68	3	CG	1.8	2.2
<i>Tvetenia</i>	09021011065		0.82	5	CG		0.5
<i>Tvetenia vitracies</i>	09021011065113	0.67			--	0.4	
<i>Stempellinella</i>	09021011074	1.00	1.23	2	--	0.6	0.7
<i>Tanytarsus</i>	09021011076	0.67	0.82	6	CF	0.4	0.5
<i>Pseudochironomus</i>	09021011078	0.33	0.41	5	CG	0.2	0.2
<i>Lauterborniella</i>	09021011092		0.41		CG		0.2
<i>Lauterborniella agrayloides</i>	09021011092001	0.33			--	0.2	
<i>Microtendipes</i>	09021011094		16.35	6	CF		9.7
<i>Microtendipes rydalensis group</i>	09021011094168	13.33			--	7.9	
<i>Phaenopsectra</i>	09021011101	0.67	0.82	7	SC	0.4	0.5
<i>Polypedilum</i>	09021011102		3.27	6	SH		1.9
<i>Polypedilum aviceps</i>	09021011102181	2.33			--	1.4	
<i>Polypedilum flavum</i>	09021011102182	0.33			--	0.2	
<i>Atherix</i>	09021015055	0.33	0.33	2	PR	0.2	0.2
<i>Psephenus</i>	09021108058		4.00	4	SC		2.4
<i>Psephenus herricki</i>	09021108058028	4.00			--	2.4	
<i>Dubiraphia</i>	09021113064	4.67	4.67	6	--	2.8	2.8
<i>Macronychus</i>	09021113065		0.33	4	--		0.2
<i>Macronychus glabratus</i>	09021113065040	0.33			--	0.2	
<i>Promoresia</i>	09021113069		1.67		--		1.0
<i>Promoresia elegans</i>	09021113069051	1.67			--	1.0	
<i>Stenelmis</i>	09021113070	1.33	1.33	5	SC	0.8	0.8
<i>Amnicola</i>	10010104013	13.00	13.00		SC	7.7	7.7



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		Actual	Adjusted			Actual	Adjusted
<i>Physa</i>	10010202027	3.33	3.33		SC	2.0	2.0
<i>Gyraulus</i>	10010203029	0.33	0.33		SC	0.2	0.2