



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

Station Information

Station Number: S-76
Waterbody: Thompson Lake Outlet - Station 76
Town: Oxford
Directions: ABOVE ROBINSON MFG, 70 M BELOW DAM
River Basin: Androscoggin
HUC8 Name: Lower Androscoggin
Latitude: 44 7 52.59 N
Longitude: 70 29 43.01 W
Stream Order: 3

Sample Information

Log Number: 2193
Subsample Factor: X1
Type of Sample: ROCK BAG
Replicates: 2
Date Deployed: 7/11/2013
Date Retrieved: 8/8/2013

Classification Attainment

Statutory Class: C
Model Result with $P \geq 0.6$: NA
Date Last Calculated: 4/30/2014
Final Determination: I
Reason for Determination: Best Professional Judgement
Date: 5/1/2014
Comments: Poor Sample. Resample.

Model Probabilities

First Stage Model		C or Better Model	
Class A	0.00	Class A, B, or C	0.38
Class B	0.01	Non-Attainment	0.62
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	182.50	18 Relative Abundance Ephemeroptera	0.04
02 Generic Richness	36.00	19 EPT Generic Richness	9.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.50
04 Ephemeroptera Mean Abundance	7.50	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.90	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	26.83
06 Hilsenhoff Biotic Index	5.58	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	6.46
07 Relative Abundance - Chironomidae	0.10	28 EP Generic Richness/14	0.21
08 Relative Generic Richness Diptera	0.28	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	2.67		
11 <i>Cheumatopsyche</i> Abundance	23.33		
12 EPT Generic Richness/ Diptera Generic Richness	0.90		
13 Relative Abundance - Oligochaeta	0.38		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	2.50		
17 Chironomini Abundance (Family Functional Group)	10.50		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Stylodrilus</i>	23.01
2	<i>Cheumatopsyche</i>	12.79
3	<i>Limnodrilus</i>	12.47
4	<i>Girardia</i>	6.85
5	<i>Pisidium</i>	5.94



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Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	23.2 deg C
Dissolved Oxygen:	7.8 mg/l
Specific Conductance:	38 uS/cm
Velocity:	36.6 cm/s
pH:	6.38
Wetted Width:	12.9 m
Bankfull Width:	12.9 m
Depth:	150 cm

Waterbody Information - Retrieval

Temperature:	23.2 deg C
Dissolved Oxygen:	8.3 mg/l
Specific Conductance:	38 uS/cm
Velocity:	
pH:	6.44
Wetted Width:	10.45 m
Bankfull Width:	12.9 m
Depth:	8 cm

Water Chemistry

Summary of Habitat Characteristics

Landuse Name

Upland Hardwood
Urban

Canopy Cover

Partly Open

Terrain

Rolling

Potential Stressor

Altered Hydrology
Lake Outlet

Location

Below Dam
Lake Outlet

Substrate

Boulder	5 %
Gravel	35 %
Rubble/Cobble	55 %
Sand	5 %

Landcover Summary - 2004 Data

Total Area (ac)	29763	High Int. Dev. %	0.1	Water %	16.4	Non-vegetated %	0.1
		Med Int. Dev. %	0.2	Wetland %	4.0	Tilled Agriculture %	0.6
		Low Int. Dev. %	3.0	Upland Woody %	71.0	Grassland %	4.7
		Development %	3.2	Natural %	75.1	Human Altered %	8.5
						Impervious %	3.0

Sample Comments

7/11/13 - HIGH WATER LEVELS, FISH AND LOON OBSERVED

8/8/13 - WATER LEVEL DROPPED SIGNIFICANTLY



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

Station Number: S-76

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Town: Oxford

Log Number: 2193

Subsample Factor: X1

Replicates: 2

Calculated: 4/30/2014

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance	
		Actual	Adjusted			Actual	Adjusted
<i>Girardia</i>	03010102002		12.50		--		6.8
<i>Girardia tigrina</i>	03010102002001	12.50			--	6.8	
<i>Prostoma</i>	04010101001	10.00	10.00		--	5.5	5.5
Oligochaeta	0802	0.50	0.50		--	0.3	0.3
<i>Stylodrilus</i>	08020101004		42.00		--		23.0
<i>Stylodrilus heringianus</i>	08020101004001	42.00			--	23.0	
Naididae	08020202	22.00			--	12.1	
<i>Nais</i>	08020202009		3.25		CG		1.8
<i>Nais variabilis</i>	08020202009009	0.50			--	0.3	
<i>Limnodrilus</i>	08020202022		22.75		CG		12.5
<i>Limnodrilus hoffmeisteri</i>	08020202022003	2.00			--	1.1	
<i>Limnodrilus udekemianus</i>	08020202022006	1.50			--	0.8	
Lumbricidae	08020205	1.50	1.50		--	0.8	0.8
<i>Erpobdella</i>	08030203002		0.50		--		0.3
<i>Erpobdella punctata</i>	08030203002001	0.50			--	0.3	
<i>Hyaella</i>	09010203006	8.00	8.00	8	CG	4.4	4.4
<i>Orconectes</i>	09010301008		0.50		CG		0.3
<i>Orconectes limosus</i>	09010301008013	0.50			--	0.3	
Entomobryidae	09020103	0.50	0.50		--	0.3	0.3
Heptageniidae	09020402	0.50			--	0.3	
<i>Stenacron</i>	09020402014	0.50	0.54	7	SC	0.3	0.3
<i>Maccaffertium</i>	09020402015	3.00	6.46	4	SC	1.6	3.5
<i>Maccaffertium modestum</i>	09020402015051	3.00			--	1.6	
<i>Caenis</i>	09020412040	0.50	0.50	7	CG	0.3	0.3
<i>Chimarra</i>	09020601003	1.00	1.00	2	CF	0.5	0.5
<i>Neureclipsis</i>	09020603008	5.00	5.00	7	CF	2.7	2.7
Hydropsychidae	09020604	6.50			--	3.6	
<i>Cheumatopsyche</i>	09020604015	17.50	23.33	5	CF	9.6	12.8
<i>Hydropsyche</i>	09020604016		2.67	4	CF		1.5
<i>Hydropsyche bronta</i>	09020604016029	1.00			--	0.5	
<i>Hydropsyche depravata species group</i>	09020604016041	1.00			CF	0.5	
<i>Hydroptila</i>	09020607026	2.50	2.50	6	P	1.4	1.4
<i>Oecetis</i>	09020618078	1.50	1.50	8	PR	0.8	0.8
Lepidoptera	090209	0.50	0.50		--	0.3	0.3
<i>Ablabesmyia</i>	09021011001		0.50	8	PR		0.3
<i>Ablabesmyia mallochii</i>	09021011001004	0.50			--	0.3	
<i>Conchapelopia</i>	09021011004	1.50	1.50	6	PR	0.8	0.8



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<i>Labrundinia</i>	09021011008		0.50	7	PR		0.3
<i>Labrundinia pilosella</i>	09021011008022	0.50			--	0.3	
<i>Pagastia</i>	09021011025		0.50	1	--		0.3
<i>Pagastia orthogonia</i>	09021011025001	0.50			--	0.3	
<i>Cricotopus</i>	09021011037	1.50	3.00	7	SH	0.8	1.6
<i>Cricotopus bicinctus</i>	09021011037057	1.50			--	0.8	
<i>Psectrocladius</i>	09021011056	0.50	0.50	8	CG	0.3	0.3
<i>Tvetenia</i>	09021011065		0.50	5	CG		0.3
<i>Tvetenia vitracies</i>	09021011065113	0.50			--	0.3	
<i>Micropsectra</i>	09021011070	0.50	0.50	7	CG	0.3	0.3
<i>Polypedilum</i>	09021011102		10.50	6	SH		5.8
<i>Polypedilum flavum</i>	09021011102182	9.00			--	4.9	
<i>Polypedilum illinoense group</i>	09021011102185	1.00			--	0.5	
<i>Polypedilum sordens</i>	09021011102201	0.50			--	0.3	
<i>Simulium</i>	09021012047		1.00	4	CF		0.5
<i>Simulium fibrinflatum</i>	09021012047059				--		
<i>Simulium vittatum</i>	09021012047064				--		
<i>Simulium tuberosum</i>	09021012047067	1.00			--	0.5	
<i>Dineutus</i>	09021104032	0.50	0.50	2	--	0.3	0.3
<i>Macronychus</i>	09021113065		0.50	4	--		0.3
<i>Macronychus glabratus</i>	09021113065040	0.50			--	0.3	
<i>Microcyloopus</i>	09021113066	3.00	3.00	3	--	1.6	1.6
<i>Amnicola</i>	10010104013	0.50	0.50		SC	0.3	0.3
Sphaeriidae	10020201	10.00			CF	5.5	
<i>Musculium</i>	10020201001		2.17		CF		1.2
<i>Musculium securis</i>	10020201001003	0.50			CF	0.3	
<i>Pisidium</i>	10020201002	2.50	10.83		CF	1.4	5.9