

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

Station Information

Station Number: W-399	Trip ID: 2023-399	River Basin:
Waterbody: AMBAJEJUS LAKE (S2)		HUC8 Name:
Town: T01 R09 Wels		Latitude:
Mitigation Monitoring Site: No		Longitude:

Sample Information

Sample ID: SB-2023-399	Type of Sample: SURBER	Sampling Organization: NORMANDEAU ASSOCIATES
Date Sampled: 8/15/2023	Replicates: 3	Taxonomist: NORMANDEAU ASSOCIATES
Subsample Factor: X1		

Classification Attainment

Statutory Class:	GPA	Final Determination:	C	Date: 1/3/2025
Model Result with $P \geq 0.6$:	B	Reason for Determination: Best Professional Judgement		
Date Last Calculated:	11/21/2024	Comments: Sample method not appropriate for model. Sample does meet structure and function.		

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A: 0.58	Class C: 0.04	Class A, B, or C	1.00
Class B: 0.38	NA: 0.00	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.96	Class A	0.58
Class C or Non-Attainment	0.04	Class B or C or Non-Attainment	0.42

Model Variables

		Reference Range (10th or 90th percentile value)
Abundance of Taxa in the Order Ephemeroptera	23.333	≥ 0.000
Relative Richness of Taxa in the Orders Ephemeroptera, Odonata and Tricoptera	0.250	≥ 0.140
Shannon-Wiener Diversity Index	3.989	≥ 2.497
Relative Abundance of Collector-Gatherer Taxa	0.322	≥ 0.131
Abundance of Sensitive Taxa	25.121	≥ 3.424
Richness of Sensitive Taxa	8.000	≥ 3.000
Maine Tolerance Index Score For Wetland Macroinvertebrates	30.409	≤ 29.776
Ratio of MTI Sensitive to Eurytopic Taxa Abundance	1.570	≥ 0.334

Other Variables

Total Mean Abundance	96
Generic Richness:	32
Hilsenhoff Biotic Index:	4.70

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Stylaria lacustris</i>	14.63
2	<i>Fossaria</i>	11.85
2	<i>Maccaffertium</i>	11.85
3	<i>Gyraulus</i>	10.10

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4	<i>Stenonema femoratum</i>	9.76
5	<i>Slavina appendiculata</i>	7.67

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Surface Water Chemistry

Sample Date: 8/15/2023 3:05:00 PM

Collection Method	Parameter	Value	Units	Qualifier
In-situ	Dissolved Oxygen	9.21	mg/l	
In-situ	pH	7.03		
In-situ	Specific Conductance	27	us/cm	
In-situ	Temperature	23.19	deg c	

Landcover Summary - 2004 Data

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Summary of Habitat Characteristics

<u>Human Disturbance</u>	<u>Landscape-level Cowardin Classification</u>	<u>Hydrogeomorphic Setting</u>
Total Score:	System:	Landscape Position:
Hydrologic Modifications:	Subsystem:	Lotic Gradient:
Vegetative Modifications:	Class 1:	Flow Path:
Chemical Pollutants:	Subclass 1:	Land Form:
Watershed	Class 2:	Land Form Type:
Characterization and	Subclass 2:	Waterbody Type:
Non-point Sources:	Class 3:	Waterbody Subtype:
	Subclass 3:	
		Comments:

Dominant Plant Species:

Additional Plant Community Observations:

Habitat Classification:

OPEN WATER STANDING

Substrate Classification:

BOULDER SUBSTRATE

GRAVEL SUBSTRATE

RUBBLE/COBBLE SUBSTRATE

Average Depth:

Visible Flow: No

Rain In Previous 24 Hours: No

Sample Comments:

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Additional Summary Variables

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		Calculated: 11/21/2024

	Abundance	Relative Abundance	Richness	Relative Richness
EOT Taxa:	25.00	0.261	8	0.25
EPT Taxa:	26.00	0.272	9	0.28
Insects:	32.00	0.334	19	0.59
Non-Insects:	63.67	0.666	13	0.41
Leeches:	0.67	0.007	1	0.03
Oligochaetes:	28.00	0.293	5	0.16
Snails:	27.67	0.289	5	0.16
Bivalves:	0.00	0.000	0	0.00
Isopods:	0.00	0.000	0	0.00
Amphipods:	5.33	0.056	1	0.03
Mites:	2.00	0.021	1	0.03
Stoneflies:	1.00	0.010	1	0.03
Mayflies:	23.33	0.244	5	0.16
Odonates:	0.00	0.000	0	0.00
Caddisflies:	1.67	0.017	3	0.09
Diptera:	5.67	0.059	9	0.28
Hemiptera:	0.00	0.000	0	0.00
Beetles:	0.33	0.003	1	0.03
Chironomids:	4.00	0.042	7	0.22
Tanypodinae Tribe:	0.00	0.000	0	0.00
Chironomiinae Tribe:	1.82	0.019	3	0.09
Orthoclodiinae Tribe:	2.18	0.023	4	0.13
Collector-Filterers:	1.09	0.011	1	0.03
Collector-Gatherers:	30.85	0.322	12	0.38
Predators:	2.03	0.021	3	0.09
Piercers:	1.33	0.014	2	0.06
Shredders:	0.36	0.004	1	0.03
Scrapers:	37.00	0.387	6	0.19
Maine Tolerance:				
Sensitive:	25.12	0.364	8	0.35
Intermediate:	27.88	0.404	13	0.57
Eurytopic:	16.00	0.232	2	0.09
Ratio of MTI Sensitive to Eurytopic	1.57	1.570	4.00	4.00

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Aquatic Life Taxonomic Inventory Report

Station Number: W-399	Waterbody: AMBAJEJUS LAKE (S2)	Town: T01 R09 Wels
Log Number: SB-2023-399	Subsample Factor: X1	Replicates: 3
		Calculated: 11/21/2024

Taxon	Maine Taxonomic Code	Count (Mean of Samples)		Hilsen- hoff Biotic Index	Func- tional Feeding Group	Maine Toler- ance Index	Tribe Taxa Group	
		Actual	Adjusted					
Lumbriculus	08020101002	0.00	1.67	--	CG	35-I	--	Worm
<i>Lumbriculus variegatus</i>	08020101002001	1.67	0.00	--	--	--	--	Worm
Stylodrilus	08020101004	0.00	0.33	--	--	--	--	Worm
<i>Stylodrilus heringianus</i>	08020101004001	0.33	0.00	--	--	--	--	Worm
Nais	08020202009	4.67	4.67	--	CG	43-E	--	Worm
Slavina	08020202012	0.00	7.33	--	--	4.2-S	--	Worm
<i>Slavina appendiculata</i>	08020202012001	7.33	0.00	--	--	--	--	Worm
Stylaria	08020202014	0.00	14.00	--	CG	18-S	--	Worm
<i>Stylaria lacustris</i>	08020202014002	14.00	0.00	--	--	--	--	Worm
Erpobdella	08030203002	0.67	0.67	--	--	36.4-I	--	Leech
Hyaella	09010203006	0.00	5.33	8	CG	24.5-I	--	Amphipod
<i>Hyaella azteca</i>	09010203006011	5.33	0.00	--	--	--	--	Amphipod
Perlinella	09020209047	1.00	1.00	1	--	--	--	Stonefly
Procloeon	09020401010	1.33	1.33	--	CG	21-S	--	Mayfly
Maccaffertium	09020402015	11.33	11.33	4	SC	--	--	Mayfly
Stenonema	09020402016	0.00	9.33	4	SC	--	--	Mayfly
<i>Stenonema femoratum</i>	09020402016001	9.33	0.00	4	SC	--	--	Mayfly
Paraleptophlebia	09020406026	1.00	1.00	1	CG	--	--	Mayfly
Eurylophella	09020410036	0.33	0.33	3	CG	23.2-I	--	Mayfly
Hydroptila	09020607026	0.67	0.67	6	P	--	--	Caddisfly
Oxyethira	09020607028	0.67	0.67	3	P	22-S	--	Caddisfly
Mystacides	09020618075	0.33	0.33	4	CG	18.2-S	--	Caddisfly
Probezzia	09021010041	1.33	1.33	6	PR	28.6-I	--	Fly: Biting Midge
Palpomyia	09021010044	0.33	0.33	6	PR	--	--	Fly: Biting Midge
Chironomidae	09021011	0.33	0.00	--	--	--	--	Fly: Midge
Corynoneura	09021011036	0.33	0.36	7	CG	40.1-I	--	Fly: Midge
Orthocladius	09021011050	0.67	0.73	6	CG	22-S	--	Fly: Midge
Psectrocladius	09021011056	0.33	0.36	8	CG	22-S	--	Fly: Midge
Thienemanniella	09021011062	0.67	0.73	6	CG	24.7-I	--	Fly: Midge
Tanytarsus	09021011076	1.00	1.09	6	CF	25.7-I	Y	Fly: Midge
Polypedilum	09021011102	0.33	0.36	6	SH	24.2-I	C	Fly: Midge
Xenochironomus	09021011108	0.00	0.36	0	PR	1.5-S	C	Fly: Midge
<i>Xenochironomus xenolabis</i>	09021011108200	0.33	0.00	--	--	--	C	Fly: Midge
Dineutus	09021104032	0.33	0.33	2	--	23.2-I	--	Beetle
Hydrachnidia	09030101	2.00	2.00	--	--	--	--	Mite

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		Actual	Adjusted					
Valvata	10010101001	5.00	5.00	--	SC	33.4-I	--	Snail
Fossaria	10010201021	11.33	11.33	--	--	56.1-E	--	Snail
Physidae	10010202	0.67	0.67	--	SC	--	--	Snail
Gyraulus	10010203029	9.67	9.67	--	SC	37.2-I	--	Snail
Helisoma	10010203030	1.00	1.00	--	SC	42.8-I	--	Snail