

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

Station Information

Station Number: W-398	Trip ID: 2023-398	River Basin:
Waterbody: AMBAJEJUS LAKE (K2)		HUC8 Name:
Town: T01 R09 Wels		Latitude:
Mitigation Monitoring Site: No		Longitude:

Sample Information

Sample ID: KQ-2023-398	Type of Sample: KICK-QUALITATIVE	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: 0.16	Class C: 0.10	Class A, B, or C	1.00
Class B: 0.74	NA: 0.00	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.90	Class A	0.16
Class C or Non-Attainment	0.10	Class B or C or Non-Attainment	0.84

Model Variables

		Reference Range (10th or 90th percentile value)
Abundance of Taxa in the Order Ephemeroptera	7.000	≥ 0.000
Relative Richness of Taxa in the Orders Ephemeroptera, Odonata and Tricoptera	0.224	≥ 0.140
Shannon-Wiener Diversity Index	3.725	≥ 2.497
Relative Abundance of Collector-Gatherer Taxa	0.673	≥ 0.131
Abundance of Sensitive Taxa	71.414	≥ 3.424
Richness of Sensitive Taxa	10.000	≥ 3.000
Maine Tolerance Index Score For Wetland Macroinvertebrates	31.127	≤ 29.776
Ratio of MTI Sensitive to Eurytopic Taxa Abundance	0.541	≥ 0.334

Other Variables

Total Mean Abundance	372
Generic Richness:	49
Hilsenhoff Biotic Index:	6.96

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Nais</i>	34.59
2	<i>Hyalella azteca</i>	15.77
3	<i>Stylaria lacustris</i>	6.54

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

4	<i>Oligochaeta</i>	5.56
5	<i>Slavina appendiculata</i>	4.03

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

Surface Water Chemistry

Sample Date: 8/15/2023 2:33:00 PM

Collection Method	Parameter	Value	Units	Qualifier
In-situ	Dissolved Oxygen	9.07	mg/l	
In-situ	pH	6.82		
In-situ	Specific Conductance	26	us/cm	
In-situ	Temperature	22.72	deg c	

Landcover Summary - 2004 Data

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

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:

DETRITUS SUBSTRATE

GRAVEL SUBSTRATE

RUBBLE/COBBLE SUBSTRATE

SAND SUBSTRATE

Average Depth:

Visible Flow: No

Rain In Previous 24 Hours: No

Sample Comments:

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

Additional Summary Variables

Station Number: W-398	Waterbody: AMBAJEJUS LAKE (K2)	Town: T01 R09 Wels
Log Number: KQ-2023-398	Subsample Factor: X1	Replicates: 3
		Calculated: 11/21/2024

	Abundance	Relative Abundance	Richness	Relative Richness
EOT Taxa:	26.33	0.071	11	0.22
EPT Taxa:	19.00	0.051	9	0.18
Insects:	90.33	0.243	35	0.71
Non-Insects:	281.67	0.757	14	0.29
Leeches:	0.00	0.000	0	0.00
Oligochaetes:	203.00	0.546	7	0.14
Snails:	13.33	0.036	4	0.08
Bivalves:	6.33	0.017	1	0.02
Isopods:	0.00	0.000	0	0.00
Amphipods:	58.67	0.158	1	0.02
Mites:	0.33	0.001	1	0.02
Stoneflies:	0.00	0.000	0	0.00
Mayflies:	7.00	0.019	5	0.10
Odonates:	7.33	0.020	2	0.04
Caddisflies:	12.00	0.032	4	0.08
Diptera:	63.00	0.169	21	0.43
Hemiptera:	0.33	0.001	1	0.02
Beetles:	0.67	0.002	2	0.04
Chironomids:	59.33	0.159	20	0.41
Tanypodinae Tribe:	7.16	0.019	4	0.08
Chironomiinae Tribe:	31.37	0.084	11	0.22
Orthoclodiinae Tribe:	20.12	0.054	4	0.08
Collector-Filterers:	15.54	0.042	2	0.04
Collector-Gatherers:	250.39	0.673	18	0.37
Predators:	22.91	0.062	10	0.20
Piercers:	10.00	0.027	2	0.04
Shredders:	6.47	0.017	2	0.04
Scrapers:	13.00	0.035	5	0.10
Maine Tolerance:				
Sensitive:	71.41	0.226	10	0.34
Intermediate:	112.70	0.356	14	0.48
Eurytopic:	132.05	0.418	5	0.17
Ratio of MTI Sensitive to Eurytopic	0.54	0.541	2.00	2.00

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

Aquatic Life Taxonomic Inventory Report

Station Number: W-398

Waterbody: AMBAJEJUS LAKE (K2)

Town: T01 R09 Wels

Log Number: KQ-2023-398

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					
Oligochaeta	0802	20.67	20.67	--	--	--	--	Oligochaete
Stylodrilus	08020101004	0.00	5.67	--	--	--	--	Worm
<i>Stylodrilus heringianus</i>	08020101004001	5.67	0.00	--	--	--	--	Worm
Tubificida	080202	0.67	0.67	--	--	--	--	Worm
Enchytraeidae	08020201	6.67	6.67	--	--	--	--	Worm
Nais	08020202009	128.67	128.67	--	CG	43-E	--	Worm
Slavina	08020202012	0.00	15.00	--	--	4.2-S	--	Worm
<i>Slavina appendiculata</i>	08020202012001	15.00	0.00	--	--	--	--	Worm
Stylaria	08020202014	0.00	24.33	--	CG	18-S	--	Worm
<i>Stylaria lacustris</i>	08020202014002	24.33	0.00	--	--	--	--	Worm
Aulodrilus	08020202018	1.00	1.00	--	--	3.8-S	--	Tubificid Worm
Lumbricidae	08020205	0.33	0.33	--	--	--	--	Worm
Hyaella	09010203006	0.00	58.67	8	CG	24.5-I	--	Amphipod
<i>Hyaella azteca</i>	09010203006011	58.67	0.00	--	--	--	--	Amphipod
Libellulidae	09020306	1.00	1.00	--	--	--	--	Dragonfly/damselfly
Enallagma	09020309051	6.33	6.33	9	PR	26.2-I	--	Dragonfly/damselfly
Centropilum	09020401003	0.67	0.67	2	CG	--	--	Mayfly
Maccaffertium	09020402015	0.33	0.33	4	SC	--	--	Mayfly
Paraleptophlebia	09020406026	0.67	0.67	1	CG	--	--	Mayfly
Ephemera	09020407027	0.33	0.33	1	CG	--	--	Mayfly
Caenis	09020412040	5.00	5.00	7	CG	22.1-I	--	Mayfly
Gerridae	09020506	0.33	0.33	--	--	--	--	True Bug
Oxyethira	09020607028	9.67	9.67	3	P	22-S	--	Caddisfly
Molanna	09020615069	0.33	0.33	6	SC	--	--	Caddisfly
Nectopsyche	09020618074	0.33	0.33	3	SH	--	--	Caddisfly
Oecetis	09020618078	1.67	1.67	8	PR	16.3-S	--	Caddisfly
Palpomyia	09021010044	3.67	3.67	6	PR	--	--	Fly: Biting Midge
Chironomidae	09021011	1.33	0.00	--	--	--	--	Fly: Midge
Ablabesmyia	09021011001	0.33	4.43	8	PR	23.6-I	T	Fly: Midge
<i>Ablabesmyia mallochii</i>	09021011001004	4.00	0.00	--	--	--	T	Fly: Midge
Clinotanypus	09021011002	0.00	0.68	8	PR	30.3-I	T	Fly: Midge
<i>Clinotanypus pinguis</i>	09021011002008	0.67	0.00	--	--	--	--	Fly: Midge
Labrundinia	09021011008	1.67	1.70	7	PR	18.1-S	T	Fly: Midge
Thienemannimyia	09021011020	0.00	0.34	3	PR	--	T	Fly: Midge
<i>Thienemannimyia group</i>	09021011020041	0.33	0.00	--	--	--	T	Fly: Midge

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

Aquatic Life Taxonomic Inventory Report

Station Number: W-398	Waterbody: AMBAJEJUS LAKE (K2)	Town: T01 R09 Wels
Log Number: KQ-2023-398	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						
Potthastia	09021011026	0.00	0.68	2	CG	--	D	Fly:	Midge
<i>Potthastia longimana</i>	09021011026046	0.67	0.00	--	--	--	D	Fly:	Midge
Corynoneura	09021011036	2.33	2.39	7	CG	40.1-I	--	Fly:	Midge
Heterotrissocladius	09021011044	1.00	1.02	0	CG	--	--	Fly:	Midge
Orthocladius	09021011050	2.00	2.05	6	CG	22-S	--	Fly:	Midge
Psectrocladius	09021011056	14.33	14.66	8	CG	22-S	--	Fly:	Midge
Cladotanytarsus	09021011068	4.00	4.09	7	CG	22.2-I	Y	Fly:	Midge
Micropsectra	09021011070	1.00	1.02	7	CG	98.1-E	Y	Fly:	Midge
Paratanytarsus	09021011071	1.00	1.02	6	--	43-E	Y	Fly:	Midge
Stempellina	09021011073	4.33	4.43	2	CG	--	Y	Fly:	Midge
Tanytarsus	09021011076	9.00	9.21	6	CF	25.7-I	Y	Fly:	Midge
Cryptochironomus	09021011082	0.00	1.36	8	PR	31.3-I	C	Fly:	Midge
<i>Cryptochironomus fulvus</i>	09021011082144	1.33	0.00	--	--	--	C	Fly:	Midge
Dicrotendipes	09021011085	0.67	0.68	8	CG	28.8-I	C	Fly:	Midge
Parachironomus	09021011097	2.33	2.39	10	PR	28.6-I	C	Fly:	Midge
Polypedilum	09021011102	1.33	6.14	6	SH	24.2-I	C	Fly:	Midge
<i>Polypedilum flavum</i>	09021011102182	2.67	0.00	--	--	--	C	Fly:	Midge
<i>Polypedilum illinoense</i>	09021011102204	2.00	0.00	--	--	--	--	Fly:	Midge
Stenochironomus	09021011105	0.33	0.34	5	CG	--	C	Fly:	Midge
Stictochironomus	09021011106	0.00	0.68	9	CG	--	C	Fly:	Midge
<i>Stictochironomus devinctus</i>	09021011106197	0.67	0.00	--	--	--	C	Fly:	Midge
Peltodytes	09021101002	0.33	0.33	--	P	56.2-E	--	Beetle	
Gyrinus	09021104033	0.33	0.33	2	PR	11.9-S	--	Beetle	
Hydrachnidia	09030101	0.33	0.33	--	--	--	--	Mite	
Valvata	10010101001	10.33	10.33	--	SC	33.4-I	--	Snail	
Amnicola	10010104013	1.00	1.00	--	SC	18.7-S	--	Snail	
Fossaria	10010201021	1.00	1.00	--	--	56.1-E	--	Snail	
Gyraulus	10010203029	1.00	1.00	--	SC	37.2-I	--	Snail	
Pisidium	10020201002	6.33	6.33	--	CF	--	--	Clam	