



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

Station Information

Station Number: S-74	River Basin:	Maine Coastal
Waterbody: Sheepscot River - Station 74	HUC8 Name:	St. George-Sheepscot
Town: Whitefield	Latitude:	44 13 23.47 N
Directions: ABOVE RT. 126 BRIDGE AT USGS GAGE	Longitude:	69 35 36.03 W
	Stream Order:	4

Sample Information

Log Number: 2756	Type of Sample: ROCK BAG	Date Deployed: 8/20/2019
Subsample Factor: X4	Replicates: 3	Date Retrieved: 8/20/2019

Classification Attainment

Statutory Class: AA	Final Determination: A	Date: 1/14/2021
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 1/14/2021	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.58	Class A, B, or C	1.00
Class B	0.41	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.94
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.06

Model Variables

01 Total Mean Abundance	869.33	18 Relative Abundance Ephemeroptera	0.11
02 Generic Richness	24.00	19 EPT Generic Richness	16.00
03 Plecoptera Mean Abundance	6.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	94.67	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	3.23	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	18.67
06 Hilsenhoff Biotic Index	2.81	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	34.67
07 Relative Abundance - Chironomidae	0.11	28 EP Generic Richness/14	0.64
08 Relative Generic Richness Diptera	0.21	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	144.00		
11 <i>Cheumatopsyche</i> Abundance	18.67		
12 EPT Generic Richness/ Diptera Generic Richness	3.20		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	6.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	9.33		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Brachycentrus</i>	35.28
2	<i>Hydropsyche</i>	16.56
3	<i>Rheotanytarsus</i>	8.74
4	<i>Simulium</i>	8.59
5	<i>Neureclipsis</i>	7.06



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Station Number: S-74	Town: Whitefield	Date Deployed: 8/20/2019
Log Number: 2756	Waterbody: Sheepscot River - Station 74	Date Retrieved: 8/20/2019

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	22.5 deg C
Dissolved Oxygen:	7.32 mg/l
Dissolved Oxygen Saturation:	83.2 %
Specific Conductance:	98.1 uS/cm
Velocity:	36.6 cm/s
pH:	7.35
Wetted Width:	24 m
Bankfull Width:	30 m
Depth:	35 cm

Waterbody Information - Retrieval

Water Chemistry - 7/31/2019

Nitrate + Nitrite As Nitrogen	0.02 mg/l	Nitrate As Nitrogen	0.02 mg/l
Nitrite As Nitrogen	<0.01 mg/l	Orthophosphate As Phosphorus	2 ug/l
Total Alkalinity	22 mg/l	Total Kjeldahl Nitrogen (organic A	0.5 mg/l
Total Phosphorus Mixed Forms (po	17 ug/l		

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Pasture	Partly Open	Rolling
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Above Road Crossing	Boulder 15 %
	Below Agriculture NPS	Gravel 15 %
		Rubble/Cobble 65 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	89648	High Int. Dev. %	0.2	Water %	4.2	Non-vegetated %	0.3
		Med Int. Dev. %	0.4	Wetland %	8.7	Tilled Agriculture %	2.3
		Low Int. Dev. %	3.1	Upland Woody %	76.1	Grassland %	4.7
		Development %	3.7	Natural %	84.0	Human Altered %	11.8
						Impervious %	3.0

Sample Comments



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
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Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
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Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Acroneuria</i>	09020209042		6.67	0	PR		0.8
<i>Acroneuria abnormis</i>	09020209042121	5.33		0	PR	0.6	
<i>Acroneuria lycorias</i>	09020209042125	1.33			--	0.2	
<i>Baetis</i>	09020401001		14.67	4	CG		1.7
<i>Baetis intercalaris</i>	09020401001008	12.00			--	1.4	
<i>Baetis pluto</i>	09020401001009	2.67			--	0.3	
<i>Heterocloeon</i>	09020401005		5.33	2	SC		0.6
<i>Heterocloeon curiosum</i>	09020401005020	5.33			--	0.6	
<i>Acerpenna</i>	09020401007		16.00	5	CG		1.8
<i>Acerpenna pygmaea</i>	09020401007011	16.00			--	1.8	
<i>Epeorus</i>	09020402009		8.00	0	SC		0.9
<i>Epeorus vitreus</i>	09020402009033	8.00			--	0.9	
<i>Leucrocuta</i>	09020402011	18.67	18.67	1	SC	2.1	2.1
<i>Maccaffertium</i>	09020402015	18.67	28.00	4	SC	2.1	3.2
<i>Maccaffertium modestum</i>	09020402015051	8.00			--	0.9	
<i>Maccaffertium vicarium</i>	09020402015055	1.33			--	0.2	
<i>Isonychia</i>	09020404018		1.33	2	CF		0.2
<i>Isonychia bicolor</i>	09020404018059	1.33			--	0.2	
<i>Serratella</i>	09020410037		2.67	2	CG		0.3
<i>Serratella serratooides</i>	09020410037124	2.67			--	0.3	
<i>Chimarra</i>	09020601003	1.33	17.33	2	CF	0.2	2.0
<i>Chimarra obscura</i>	09020601003003	5.33			--	0.6	
<i>Chimarra socia</i>	09020601003004	10.67			--	1.2	
<i>Neureclipsis</i>	09020603008	61.33	61.33	7	CF	7.1	7.1
<i>Cheumatopsyche</i>	09020604015	18.67	18.67	5	CF	2.1	2.1
<i>Hydropsyche</i>	09020604016	10.67	144.00	4	CF	1.2	16.6
<i>Hydropsyche morosa</i>	09020604016030	68.00			--	7.8	
<i>Hydropsyche sparna</i>	09020604016032	22.67			--	2.6	
<i>Hydropsyche betteni</i>	09020604016037	22.67			--	2.6	
<i>Hydropsyche scalaris species group</i>	09020604016048	20.00			--	2.3	
<i>Macrostemum</i>	09020604018		34.67	3	CF		4.0



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Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Macrostemum zebratum</i>	09020604018054	34.67			--	4.0	
<i>Brachycentrus</i>	09020609043		306.67	0	CF		35.3
<i>Brachycentrus appalachia</i>	09020609043096	304.00			--	35.0	
<i>Brachycentrus numerosus</i>	09020609043098	2.67			--	0.3	
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.2	0.2
<i>Tvetenia</i>	09021011065		10.67	5	CG		1.2
<i>Tvetenia vitracies</i>	09021011065113	10.67			--	1.2	
<i>Rheotanytarsus</i>	09021011072		76.00	6	CF		8.7
<i>Rheotanytarsus exiguus group</i>	09021011072127	73.33			CF	8.4	
<i>Rheotanytarsus pellucidus</i>	09021011072128	2.67			CF	0.3	
<i>Microtendipes</i>	09021011094		4.00	6	CF		0.5
<i>Microtendipes rydalensis group</i>	09021011094168	4.00			--	0.5	
<i>Polypedilum</i>	09021011102		5.33	6	SH		0.6
<i>Polypedilum aviceps</i>	09021011102181	1.33			--	0.2	
<i>Polypedilum flavum</i>	09021011102182	4.00			--	0.5	
<i>Simulium</i>	09021012047	74.67	74.67	4	CF	8.6	8.6
<i>Microcylloepus</i>	09021113066		1.33	3	--		0.2
<i>Microcylloepus pusillus</i>	09021113066041	1.33			--	0.2	
<i>Stenelmis</i>	09021113070		8.00	5	SC		0.9
<i>Stenelmis concinna</i>	09021113070054	8.00			--	0.9	
<i>Amnicola</i>	10010104013	4.00	4.00		SC	0.5	0.5



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Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
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Model Probabilities

First Stage Model		C or Better Model	
Class A	0.58	Class A, B, or C	1.00
Class B	0.41	Non-Attainment	0.00
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04 Ephemeroptera Mean Abundance	94.67	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	3.23	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	18.67
06 Hilsenhoff Biotic Index	2.81	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	34.67
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08 Relative Generic Richness Diptera	0.21	30 Presence of Class A Indicator Taxa/7	0.43
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Log Number: 2756	Waterbody: Sheepscot River - Station 74	Date Retrieved: 8/20/2019

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	22.5 deg C
Dissolved Oxygen:	7.32 mg/l
Dissolved Oxygen Saturation:	83.2 %
Specific Conductance:	98.1 uS/cm
Velocity:	36.6 cm/s
pH:	7.35
Wetted Width:	24 m
Bankfull Width:	30 m
Depth:	35 cm

Waterbody Information - Retrieval

Water Chemistry - 7/31/2019

Nitrate + Nitrite As Nitrogen	0.02 mg/l	Nitrate As Nitrogen	0.02 mg/l
Nitrite As Nitrogen	<0.01 mg/l	Orthophosphate As Phosphorus	2 ug/l
Total Alkalinity	22 mg/l	Total Kjeldahl Nitrogen (organic A	0.5 mg/l
Total Phosphorus Mixed Forms (po	17 ug/l		

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Pasture	Partly Open	Rolling
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Above Road Crossing	Boulder 15 %
	Below Agriculture NPS	Gravel 15 %
		Rubble/Cobble 65 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	89648	High Int. Dev. %	0.2	Water %	4.2	Non-vegetated %	0.3
		Med Int. Dev. %	0.4	Wetland %	8.7	Tilled Agriculture %	2.3
		Low Int. Dev. %	3.1	Upland Woody %	76.1	Grassland %	4.7
		Development %	3.7	Natural %	84.0	Human Altered %	11.8
						Impervious %	3.0

Sample Comments



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Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Acroneuria</i>	09020209042		6.67	0	PR		0.8
<i>Acroneuria abnormis</i>	09020209042121	5.33		0	PR	0.6	
<i>Acroneuria lycorias</i>	09020209042125	1.33			--	0.2	
<i>Baetis</i>	09020401001		14.67	4	CG		1.7
<i>Baetis intercalaris</i>	09020401001008	12.00			--	1.4	
<i>Baetis pluto</i>	09020401001009	2.67			--	0.3	
<i>Heterocloeon</i>	09020401005		5.33	2	SC		0.6
<i>Heterocloeon curiosum</i>	09020401005020	5.33			--	0.6	
<i>Acerpenna</i>	09020401007		16.00	5	CG		1.8
<i>Acerpenna pygmaea</i>	09020401007011	16.00			--	1.8	
<i>Epeorus</i>	09020402009		8.00	0	SC		0.9
<i>Epeorus vitreus</i>	09020402009033	8.00			--	0.9	
<i>Leucrocuta</i>	09020402011	18.67	18.67	1	SC	2.1	2.1
<i>Maccaffertium</i>	09020402015	18.67	28.00	4	SC	2.1	3.2
<i>Maccaffertium modestum</i>	09020402015051	8.00			--	0.9	
<i>Maccaffertium vicarium</i>	09020402015055	1.33			--	0.2	
<i>Isonychia</i>	09020404018		1.33	2	CF		0.2
<i>Isonychia bicolor</i>	09020404018059	1.33			--	0.2	
<i>Serratella</i>	09020410037		2.67	2	CG		0.3
<i>Serratella serratooides</i>	09020410037124	2.67			--	0.3	
<i>Chimarra</i>	09020601003	1.33	17.33	2	CF	0.2	2.0
<i>Chimarra obscura</i>	09020601003003	5.33			--	0.6	
<i>Chimarra socia</i>	09020601003004	10.67			--	1.2	
<i>Neureclipsis</i>	09020603008	61.33	61.33	7	CF	7.1	7.1
<i>Cheumatopsyche</i>	09020604015	18.67	18.67	5	CF	2.1	2.1
<i>Hydropsyche</i>	09020604016	10.67	144.00	4	CF	1.2	16.6
<i>Hydropsyche morosa</i>	09020604016030	68.00			--	7.8	
<i>Hydropsyche sparna</i>	09020604016032	22.67			--	2.6	
<i>Hydropsyche betteni</i>	09020604016037	22.67			--	2.6	
<i>Hydropsyche scalaris species group</i>	09020604016048	20.00			--	2.3	
<i>Macrostemum</i>	09020604018		34.67	3	CF		4.0



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Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Macrostemum zebratum</i>	09020604018054	34.67			--	4.0	
<i>Brachycentrus</i>	09020609043		306.67	0	CF		35.3
<i>Brachycentrus appalachia</i>	09020609043096	304.00			--	35.0	
<i>Brachycentrus numerosus</i>	09020609043098	2.67			--	0.3	
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.2	0.2
<i>Tvetenia</i>	09021011065		10.67	5	CG		1.2
<i>Tvetenia vitracies</i>	09021011065113	10.67			--	1.2	
<i>Rheotanytarsus</i>	09021011072		76.00	6	CF		8.7
<i>Rheotanytarsus exiguus group</i>	09021011072127	73.33			CF	8.4	
<i>Rheotanytarsus pellucidus</i>	09021011072128	2.67			CF	0.3	
<i>Microtendipes</i>	09021011094		4.00	6	CF		0.5
<i>Microtendipes rydalensis group</i>	09021011094168	4.00			--	0.5	
<i>Polypedilum</i>	09021011102		5.33	6	SH		0.6
<i>Polypedilum aviceps</i>	09021011102181	1.33			--	0.2	
<i>Polypedilum flavum</i>	09021011102182	4.00			--	0.5	
<i>Simulium</i>	09021012047	74.67	74.67	4	CF	8.6	8.6
<i>Microcylloepus</i>	09021113066		1.33	3	--		0.2
<i>Microcylloepus pusillus</i>	09021113066041	1.33			--	0.2	
<i>Stenelmis</i>	09021113070		8.00	5	SC		0.9
<i>Stenelmis concinna</i>	09021113070054	8.00			--	0.9	
<i>Amnicola</i>	10010104013	4.00	4.00		SC	0.5	0.5



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Station Information

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Directions: ABOVE RT. 126 BRIDGE AT USGS GAGE	Longitude:	69 35 36.03 W
	Stream Order:	4

Sample Information

Log Number: 2756	Type of Sample: ROCK BASKET	Date Deployed: 7/22/2019
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Classification Attainment

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Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
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<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.58	Class C	0.01	Class A, B, or C	1.00
Class B	0.41	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	0.94
Class C or Non-Attainment			0.00	Class B or C or Non-Attainment	0.06

Model Variables

01 Total Mean Abundance	869.33	18 Relative Abundance Ephemeroptera	0.11
02 Generic Richness	24.00	19 EPT Generic Richness	16.00
03 Plecoptera Mean Abundance	6.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	94.67	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	3.23	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	18.67
06 Hilsenhoff Biotic Index	2.81	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	34.67
07 Relative Abundance - Chironomidae	0.11	28 EP Generic Richness/14	0.64
08 Relative Generic Richness Diptera	0.21	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	144.00		
11 <i>Cheumatopsyche</i> Abundance	18.67		
12 EPT Generic Richness/ Diptera Generic Richness	3.20		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	6.67		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	9.33		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Brachycentrus</i>	35.28
2	<i>Hydropsyche</i>	16.56
3	<i>Rheotanytarsus</i>	8.74
4	<i>Simulium</i>	8.59
5	<i>Neureclipsis</i>	7.06



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

Station Number: S-74	Town: Whitefield	Date Deployed: 7/22/2019
Log Number: 2756	Waterbody: Sheepscot River - Station 74	Date Retrieved: 7/22/2019

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	22.2 deg C
Dissolved Oxygen:	7.1 mg/l
Dissolved Oxygen Saturation:	86.9 %
Specific Conductance:	74.2 uS/cm
Velocity:	39.6 cm/s
pH:	7.22
Wetted Width:	28 m
Bankfull Width:	30 m
Depth:	45 cm

Waterbody Information - Retrieval

Water Chemistry - 7/31/2019

Nitrate + Nitrite As Nitrogen	0.02 mg/l	Nitrate As Nitrogen	0.02 mg/l
Nitrite As Nitrogen	<0.01 mg/l	Orthophosphate As Phosphorus	2 ug/l
Total Alkalinity	22 mg/l	Total Kjeldahl Nitrogen (organic A	0.5 mg/l
Total Phosphorus Mixed Forms (po	17 ug/l		

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Pasture	Partly Open	Rolling
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Above Road Crossing	Boulder 15 %
	Below Agriculture NPS	Gravel 15 %
		Rubble/Cobble 65 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	89648	High Int. Dev. %	0.2	Water %	4.2	Non-vegetated %	0.3
		Med Int. Dev. %	0.4	Wetland %	8.7	Tilled Agriculture %	2.3
		Low Int. Dev. %	3.1	Upland Woody %	76.1	Grassland %	4.7
		Development %	3.7	Natural %	84.0	Human Altered %	11.8
						Impervious %	3.0

Sample Comments



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Acroneuria</i>	09020209042		6.67	0	PR		0.8
<i>Acroneuria abnormis</i>	09020209042121	5.33		0	PR	0.6	
<i>Acroneuria lycorias</i>	09020209042125	1.33			--	0.2	
<i>Baetis</i>	09020401001		14.67	4	CG		1.7
<i>Baetis intercalaris</i>	09020401001008	12.00			--	1.4	
<i>Baetis pluto</i>	09020401001009	2.67			--	0.3	
<i>Heterocloeon</i>	09020401005		5.33	2	SC		0.6
<i>Heterocloeon curiosum</i>	09020401005020	5.33			--	0.6	
<i>Acerpenna</i>	09020401007		16.00	5	CG		1.8
<i>Acerpenna pygmaea</i>	09020401007011	16.00			--	1.8	
<i>Epeorus</i>	09020402009		8.00	0	SC		0.9
<i>Epeorus vitreus</i>	09020402009033	8.00			--	0.9	
<i>Leucrocuta</i>	09020402011	18.67	18.67	1	SC	2.1	2.1
<i>Maccaffertium</i>	09020402015	18.67	28.00	4	SC	2.1	3.2
<i>Maccaffertium modestum</i>	09020402015051	8.00			--	0.9	
<i>Maccaffertium vicarium</i>	09020402015055	1.33			--	0.2	
<i>Isonychia</i>	09020404018		1.33	2	CF		0.2
<i>Isonychia bicolor</i>	09020404018059	1.33			--	0.2	
<i>Serratella</i>	09020410037		2.67	2	CG		0.3
<i>Serratella serratooides</i>	09020410037124	2.67			--	0.3	
<i>Chimarra</i>	09020601003	1.33	17.33	2	CF	0.2	2.0
<i>Chimarra obscura</i>	09020601003003	5.33			--	0.6	
<i>Chimarra socia</i>	09020601003004	10.67			--	1.2	
<i>Neureclipsis</i>	09020603008	61.33	61.33	7	CF	7.1	7.1
<i>Cheumatopsyche</i>	09020604015	18.67	18.67	5	CF	2.1	2.1
<i>Hydropsyche</i>	09020604016	10.67	144.00	4	CF	1.2	16.6
<i>Hydropsyche morosa</i>	09020604016030	68.00			--	7.8	
<i>Hydropsyche sparna</i>	09020604016032	22.67			--	2.6	
<i>Hydropsyche betteni</i>	09020604016037	22.67			--	2.6	
<i>Hydropsyche scalaris species group</i>	09020604016048	20.00			--	2.3	
<i>Macrostemum</i>	09020604018		34.67	3	CF		4.0



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report**

Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Macrostemum zebratum</i>	09020604018054	34.67			--	4.0	
<i>Brachycentrus</i>	09020609043		306.67	0	CF		35.3
<i>Brachycentrus appalachia</i>	09020609043096	304.00			--	35.0	
<i>Brachycentrus numerosus</i>	09020609043098	2.67			--	0.3	
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.2	0.2
<i>Tvetenia</i>	09021011065		10.67	5	CG		1.2
<i>Tvetenia vitracies</i>	09021011065113	10.67			--	1.2	
<i>Rheotanytarsus</i>	09021011072		76.00	6	CF		8.7
<i>Rheotanytarsus exiguus group</i>	09021011072127	73.33			CF	8.4	
<i>Rheotanytarsus pellucidus</i>	09021011072128	2.67			CF	0.3	
<i>Microtendipes</i>	09021011094		4.00	6	CF		0.5
<i>Microtendipes rydalensis group</i>	09021011094168	4.00			--	0.5	
<i>Polypedilum</i>	09021011102		5.33	6	SH		0.6
<i>Polypedilum aviceps</i>	09021011102181	1.33			--	0.2	
<i>Polypedilum flavum</i>	09021011102182	4.00			--	0.5	
<i>Simulium</i>	09021012047	74.67	74.67	4	CF	8.6	8.6
<i>Microcylloepus</i>	09021113066		1.33	3	--		0.2
<i>Microcylloepus pusillus</i>	09021113066041	1.33			--	0.2	
<i>Stenelmis</i>	09021113070		8.00	5	SC		0.9
<i>Stenelmis concinna</i>	09021113070054	8.00			--	0.9	
<i>Amnicola</i>	10010104013	4.00	4.00		SC	0.5	0.5



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

Station Information

Station Number: S-74	River Basin: Maine Coastal
Waterbody: Sheepscot River - Station 74	HUC8 Name: St. George-Sheepscot
Town: Whitefield	Latitude: 44 13 23.47 N
Directions: ABOVE RT. 126 BRIDGE AT USGS GAGE	Longitude: 69 35 36.03 W
	Stream Order: 4

Sample Information

Log Number: 2756	Type of Sample: ROCK BASKET	Date Deployed: 7/22/2019
Subsample Factor: X4	Replicates: 3	Date Retrieved: 7/22/2019

Classification Attainment

Statutory Class: AA	Final Determination: A	Date: 1/14/2021
Model Result with $P \geq 0.6$: A	Reason for Determination: Model	
Date Last Calculated: 1/14/2021	Comments:	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.58	Class A, B, or C	1.00
Class B	0.41	Non-Attainment	0.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	1.00	Class A	0.94
Class C or Non-Attainment	0.00	Class B or C or Non-Attainment	0.06

Model Variables

01 Total Mean Abundance	869.33	18 Relative Abundance Ephemeroptera	0.11
02 Generic Richness	24.00	19 EPT Generic Richness	16.00
03 Plecoptera Mean Abundance	6.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	94.67	23 Relative Generic Richness- Plecoptera	0.04
05 Shannon-Wiener Generic Diversity	3.23	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	18.67
06 Hilsenhoff Biotic Index	2.81	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	34.67
07 Relative Abundance - Chironomidae	0.11	28 EP Generic Richness/14	0.64
08 Relative Generic Richness Diptera	0.21	30 Presence of Class A Indicator Taxa/7	0.43
09 <i>Hydropsyche</i> Abundance	144.00		
11 <i>Cheumatopsyche</i> Abundance	18.67		
12 EPT Generic Richness/ Diptera Generic Richness	3.20		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	<i>Brachycentrus</i>	35.28
2	<i>Hydropsyche</i>	16.56
3	<i>Rheotanytarsus</i>	8.74
4	<i>Simulium</i>	8.59
5	<i>Neureclipsis</i>	7.06



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

Station Number: S-74	Town: Whitefield	Date Deployed: 7/22/2019
Log Number: 2756	Waterbody: Sheepscot River - Station 74	Date Retrieved: 7/22/2019

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	22.2 deg C
Dissolved Oxygen:	7.1 mg/l
Dissolved Oxygen Saturation:	86.9 %
Specific Conductance:	74.2 uS/cm
Velocity:	39.6 cm/s
pH:	7.22
Wetted Width:	28 m
Bankfull Width:	30 m
Depth:	45 cm

Waterbody Information - Retrieval

Water Chemistry - 7/31/2019

Nitrate + Nitrite As Nitrogen	0.02 mg/l	Nitrate As Nitrogen	0.02 mg/l
Nitrite As Nitrogen	<0.01 mg/l	Orthophosphate As Phosphorus	2 ug/l
Total Alkalinity	22 mg/l	Total Kjeldahl Nitrogen (organic A	0.5 mg/l
Total Phosphorus Mixed Forms (po	17 ug/l		

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Pasture	Partly Open	Rolling
Upland Hardwood		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Above Road Crossing	Boulder 15 %
	Below Agriculture NPS	Gravel 15 %
		Rubble/Cobble 65 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	89648	High Int. Dev. %	0.2	Water %	4.2	Non-vegetated %	0.3
		Med Int. Dev. %	0.4	Wetland %	8.7	Tilled Agriculture %	2.3
		Low Int. Dev. %	3.1	Upland Woody %	76.1	Grassland %	4.7
		Development %	3.7	Natural %	84.0	Human Altered %	11.8
						Impervious %	3.0

Sample Comments



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report**

Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
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Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Acroneuria</i>	09020209042		6.67	0	PR		0.8
<i>Acroneuria abnormis</i>	09020209042121	5.33		0	PR	0.6	
<i>Acroneuria lycorias</i>	09020209042125	1.33			--	0.2	
<i>Baetis</i>	09020401001		14.67	4	CG		1.7
<i>Baetis intercalaris</i>	09020401001008	12.00			--	1.4	
<i>Baetis pluto</i>	09020401001009	2.67			--	0.3	
<i>Heterocloeon</i>	09020401005		5.33	2	SC		0.6
<i>Heterocloeon curiosum</i>	09020401005020	5.33			--	0.6	
<i>Acerpenna</i>	09020401007		16.00	5	CG		1.8
<i>Acerpenna pygmaea</i>	09020401007011	16.00			--	1.8	
<i>Epeorus</i>	09020402009		8.00	0	SC		0.9
<i>Epeorus vitreus</i>	09020402009033	8.00			--	0.9	
<i>Leucrocuta</i>	09020402011	18.67	18.67	1	SC	2.1	2.1
<i>Maccaffertium</i>	09020402015	18.67	28.00	4	SC	2.1	3.2
<i>Maccaffertium modestum</i>	09020402015051	8.00			--	0.9	
<i>Maccaffertium vicarium</i>	09020402015055	1.33			--	0.2	
<i>Isonychia</i>	09020404018		1.33	2	CF		0.2
<i>Isonychia bicolor</i>	09020404018059	1.33			--	0.2	
<i>Serratella</i>	09020410037		2.67	2	CG		0.3
<i>Serratella serratooides</i>	09020410037124	2.67			--	0.3	
<i>Chimarra</i>	09020601003	1.33	17.33	2	CF	0.2	2.0
<i>Chimarra obscura</i>	09020601003003	5.33			--	0.6	
<i>Chimarra socia</i>	09020601003004	10.67			--	1.2	
<i>Neureclipsis</i>	09020603008	61.33	61.33	7	CF	7.1	7.1
<i>Cheumatopsyche</i>	09020604015	18.67	18.67	5	CF	2.1	2.1
<i>Hydropsyche</i>	09020604016	10.67	144.00	4	CF	1.2	16.6
<i>Hydropsyche morosa</i>	09020604016030	68.00			--	7.8	
<i>Hydropsyche sparna</i>	09020604016032	22.67			--	2.6	
<i>Hydropsyche betteni</i>	09020604016037	22.67			--	2.6	
<i>Hydropsyche scalaris species group</i>	09020604016048	20.00			--	2.3	
<i>Macrostemum</i>	09020604018		34.67	3	CF		4.0



Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report

Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
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Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021
Station Number: S-74	Waterbody: Sheepscot River - Station 74	Town: Whitefield
Log Number: 2756	Subsample Factor: X4 Replicates: 3	Calculated: 1/14/2021

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Macrostemum zebratum</i>	09020604018054	34.67			--	4.0	
<i>Brachycentrus</i>	09020609043		306.67	0	CF		35.3
<i>Brachycentrus appalachia</i>	09020609043096	304.00			--	35.0	
<i>Brachycentrus numerosus</i>	09020609043098	2.67			--	0.3	
<i>Lepidostoma</i>	09020611064	1.33	1.33	1	SH	0.2	0.2
<i>Tvetenia</i>	09021011065		10.67	5	CG		1.2
<i>Tvetenia vitracies</i>	09021011065113	10.67			--	1.2	
<i>Rheotanytarsus</i>	09021011072		76.00	6	CF		8.7
<i>Rheotanytarsus exiguus group</i>	09021011072127	73.33			CF	8.4	
<i>Rheotanytarsus pellucidus</i>	09021011072128	2.67			CF	0.3	
<i>Microtendipes</i>	09021011094		4.00	6	CF		0.5
<i>Microtendipes rydalensis group</i>	09021011094168	4.00			--	0.5	
<i>Polypedilum</i>	09021011102		5.33	6	SH		0.6
<i>Polypedilum aviceps</i>	09021011102181	1.33			--	0.2	
<i>Polypedilum flavum</i>	09021011102182	4.00			--	0.5	
<i>Simulium</i>	09021012047	74.67	74.67	4	CF	8.6	8.6
<i>Microcylloepus</i>	09021113066		1.33	3	--		0.2
<i>Microcylloepus pusillus</i>	09021113066041	1.33			--	0.2	
<i>Stenelmis</i>	09021113070		8.00	5	SC		0.9
<i>Stenelmis concinna</i>	09021113070054	8.00			--	0.9	
<i>Amnicola</i>	10010104013	4.00	4.00		SC	0.5	0.5