



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

Station Information

Station Number:	S-768	River Basin:	Kennebec
Waterbody:	Carrying Place Stream - Station 768	HUC8 Name:	Lower Kennebec
Town:	Carrying Place Twp	Latitude:	45 10 53.36 N
Directions:	RT 16 TO RIDGE RD, TAKE CARRYING POND RD TO MILE-2 BRIDGE	Longitude:	70 0 59.33 W
		Stream Order:	2

Sample Information

Log Number:	2557	Type of Sample:	ROCK BAG	Date Deployed:	7/10/2017
Subsample Factor:	X1	Replicates:	3	Date Retrieved:	8/7/2017

Classification Attainment

Statutory Class:	A	Final Determination:	A	Date:	12/11/2017
Model Result with $P \geq 0.6$:	A	Reason for Determination:	Model		
Date Last Calculated:	12/8/2017	Comments:			

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.66	Class C	0.01	Class A, B, or C	1.00
Class B	0.34	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	1.00
Class C or Non-Attainment			0.00	Class B or C or Non-Attainment	0.00

Model Variables

01 Total Mean Abundance	424.33	18 Relative Abundance Ephemeroptera	0.37
02 Generic Richness	69.00	19 EPT Generic Richness	35.00
03 Plecoptera Mean Abundance	7.67	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	57.96
04 Ephemeroptera Mean Abundance	159.00	23 Relative Generic Richness- Plecoptera	0.07
05 Shannon-Wiener Generic Diversity	4.50	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	26.22
06 Hilsenhoff Biotic Index	5.22	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	3.33
07 Relative Abundance - Chironomidae	0.42	28 EP Generic Richness/14	1.29
08 Relative Generic Richness Diptera	0.30	30 Presence of Class A Indicator Taxa/7	0.71
09 <i>Hydropsyche</i> Abundance	1.67		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	1.67		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	1.33		
16 Tanypodinae Mean Abundance (Family Functional Group)	30.36		
17 Chironomini Abundance (Family Functional Group)	33.81		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Caenis</i>	17.99
2	<i>Micropsectra</i>	13.66
3	<i>Eurylophella</i>	9.03
4	<i>Promoresia</i>	8.48
5	<i>Thienemannimyia</i>	6.50



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

Station Number: S-768

Town: Carrying Place Twp

Date Deployed: 7/10/2017

Log Number: 2557

Waterbody: Carrying Place Stream - Station 768

Date Retrieved: 8/7/2017

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL COLE

Waterbody Information - Deployment

Temperature:	16.7 deg C
Dissolved Oxygen:	10.73 mg/l
Dissolved Oxygen Saturation:	111.9 %
Specific Conductance:	30.1 uS/cm
Velocity:	18.3 cm/s
pH:	7.41
Wetted Width:	12.8 m
Bankfull Width:	12.8 m
Depth:	48 cm

Waterbody Information - Retrieval

Temperature:	16.3 deg C
Dissolved Oxygen:	11.07 mg/l
Dissolved Oxygen Saturation:	114.7 %
Specific Conductance:	35.7 uS/cm
Velocity:	12.2 cm/s
pH:	7.69
Wetted Width:	12.8 m
Bankfull Width:	12.8 m
Depth:	45 cm

Water Chemistry

Summary of Habitat Characteristics

Landuse Name

Upland Conifer

Upland Hardwood

Potential Stressor

Altered Habitat

Canopy Cover

Partly Open

Location

Below Forestry NPS

Terrain

Rolling

Substrate

Bedrock	50 %
Boulder	25 %
Gravel	5 %
Rubble/Cobble	15 %
Sand	5 %

Landcover Summary - 2004 Data

Total Area (ac)	6557	High Int. Dev. %	0.0	Water %	4.9	Non-vegetated %	0.3
		Med Int. Dev. %	0.0	Wetland %	2.5	Tilled Agriculture %	0.0
		Low Int. Dev. %	0.8	Upland Woody %	91.6	Grassland %	0.1
		Development %	0.8	Natural %	94.3	Human Altered %	0.8
						Impervious %	0.1

Sample Comments

7/10/17: AREA AROUND STREAM DOES NOT APPEAR TO HAVE BEEN CUT SINCE LAST SAMPLING IN 2012.



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

Station Number: S-768

Waterbody: Carrying Place Stream - Station 768

Town: Carrying Place Twp

Log Number: 2557

Subsample Factor: X1

Replicates: 3

Calculated: 12/8/2017

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Hydra</i>	02010101001	0.33	0.33		PR	0.1	0.1
<i>Girardia</i>	03010102002	0.33	0.33		--	0.1	0.1
<i>Nais</i>	08020202009	1.33	1.33		CG	0.3	0.3
<i>Hyaella</i>	09010203006	0.33	0.33	8	CG	0.1	0.1
<i>Leuctra</i>	09020204020	3.33	3.33	0	SH	0.8	0.8
<i>Pteronarcys</i>	09020205023	2.67	2.67	0	SH	0.6	0.6
<i>Isoperla</i>	09020207026	0.33	0.33	2	PR	0.1	0.1
Perlidae	09020209	0.33	0.33		--	0.1	0.1
<i>Agnetina</i>	09020209050		1.00	2	PR		0.2
<i>Agnetina capitata</i>	09020209050152	1.00		2	PR	0.2	
Aeshnidae	09020301	0.33	0.33		--	0.1	0.1
<i>Boyeria</i>	09020301004	0.67	1.33	2	PR	0.2	0.3
<i>Boyeria grafiana</i>	09020301004011	0.67			--	0.2	
<i>Cordulegaster</i>	09020303019	0.67	0.67	3	PR	0.2	0.2
<i>Calopteryx</i>	09020307043	0.67	0.67	5	PR	0.2	0.2
Baetidae	09020401	0.33			--	0.1	
<i>Baetis</i>	09020401001	0.33	1.36	4	CG	0.1	0.3
<i>Baetis flavistriga</i>	09020401001004	1.00			--	0.2	
<i>Acerpenna</i>	09020401007		11.91	5	CG		2.8
<i>Acerpenna macdunnoughi</i>	09020401007001	11.67			--	2.7	
<i>Proclonon</i>	09020401010	0.33	0.34		CG	0.1	0.1
<i>Diphetor</i>	09020401013		2.38		--		0.6
<i>Diphetor hageni</i>	09020401013001	2.33			--	0.5	
<i>Leucrocuta</i>	09020402011	3.67	3.67	1	SC	0.9	0.9
<i>Stenacron</i>	09020402014		3.00	7	SC		0.7
<i>Stenacron interpunctatum</i>	09020402014045	3.00			--	0.7	
<i>Maccaffertium</i>	09020402015	2.33	3.33	4	SC	0.5	0.8
<i>Maccaffertium vicarium</i>	09020402015055	1.00			--	0.2	
Leptophlebiidae	09020406	5.00			--	1.2	
<i>Habrophlebia</i>	09020406023		8.57		--		2.0
<i>Habrophlebia vibrans</i>	09020406023072	5.00			--	1.2	
<i>Paraleptophlebia</i>	09020406026		3.43	1	CG		0.8
<i>Paraleptophlebia debilis</i>	09020406026079	2.00		1	CG	0.5	
<i>Ephemerella</i>	09020410035	6.00	6.00	1	CG	1.4	1.4
<i>Eurylophella</i>	09020410036		38.33	3	CG		9.0
<i>Eurylophella funeralis</i>	09020410036115	38.33			SH	9.0	
<i>Serratella</i>	09020410037		0.33	2	CG		0.1



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

Station Number: S-768

Waterbody: Carrying Place Stream - Station 768

Town: Carrying Place Twp

Log Number: 2557

Subsample Factor: X1

Replicates: 3

Calculated: 12/8/2017

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Serratella serratoides</i>	09020410037124	0.33			--	0.1	
<i>Caenis</i>	09020412040	76.33	76.33	7	CG	18.0	18.0
<i>Neureclipsis</i>	09020603008	4.33	4.33	7	CF	1.0	1.0
<i>Nyctiophylax</i>	09020603009	0.67	0.67	5	PR	0.2	0.2
<i>Polycentropus</i>	09020603010	2.67	2.67	6	PR	0.6	0.6
<i>Hydropsyche</i>	09020604016	0.33	1.67	4	CF	0.1	0.4
<i>Hydropsyche alhedra</i>	09020604016028	0.67			--	0.2	
<i>Hydropsyche sparna</i>	09020604016032	0.33			--	0.1	
<i>Hydropsyche betteni</i>	09020604016037	0.33			--	0.1	
<i>Rhyacophila</i>	09020605019	0.67	1.00	2	PR	0.2	0.2
<i>Rhyacophila fuscula</i>	09020605019060	0.33			PR	0.1	
<i>Glossosoma</i>	09020606020	0.67	0.67	0	SC	0.2	0.2
<i>Hydroptila</i>	09020607026	0.33	0.33	6	P	0.1	0.1
<i>Oxyethira</i>	09020607028	4.00	4.00	3	P	0.9	0.9
<i>Oligostomis</i>	09020608039	2.33	2.33	2	PR	0.5	0.5
<i>Micrasema</i>	09020609044	0.33	0.33	2	SH	0.1	0.1
Limnephilidae	09020610	1.00	1.00		--	0.2	0.2
<i>Pycnopsyche</i>	09020610049	0.67	0.67	4	SH	0.2	0.2
<i>Lepidostoma</i>	09020611064	1.67	1.67	1	SH	0.4	0.4
<i>Psilotreta</i>	09020614068		7.00	0	SC		1.6
<i>Psilotreta labida</i>	09020614068133	7.00			--	1.6	
Leptoceridae	09020618	2.33	2.33		--	0.5	0.5
<i>Oecetis</i>	09020618078		1.33	8	PR		0.3
<i>Oecetis persimilis</i>	09020618078157	1.33			--	0.3	
<i>Apatania</i>	09020619061	0.33	0.33		SC	0.1	0.1
<i>Nigronia</i>	09020701003		0.33	0	PR		0.1
<i>Nigronia serricornis</i>	09020701003003	0.33			--	0.1	
<i>Bezzia/palpomyia</i>	09021010043	0.67	0.67	6	PR	0.2	0.2
Chironomidae	09021011	6.00			--	1.4	
<i>Labrundinia</i>	09021011008	1.33	1.38	7	PR	0.3	0.3
<i>Thienemannimyia</i>	09021011020		27.60	3	PR		6.5
<i>Thienemannimyia group</i>	09021011020041	26.67			--	6.3	
<i>Zavrelimyia</i>	09021011022	1.33	1.38	8	PR	0.3	0.3
<i>Pagastia</i>	09021011025	2.00	2.07	1	--	0.5	0.5
<i>Potthastia</i>	09021011026		2.07	2	CG		0.5
<i>Potthastia longimana</i>	09021011026046	2.00			--	0.5	
<i>Cricotopus</i>	09021011037	3.33	24.15	7	SH	0.8	5.7
<i>Cricotopus bicinctus</i>	09021011037057	19.33			--	4.6	



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

Station Number: S-768

Waterbody: Carrying Place Stream - Station 768

Town: Carrying Place Twp

Log Number: 2557

Subsample Factor: X1

Replicates: 3

Calculated: 12/8/2017

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Cricotopus trifascia</i>	09021011037070	0.67			--	0.2	
<i>Orthocladius</i>	09021011050		2.07	6	CG		0.5
<i>Orthocladius annectens</i>	09021011050092	1.33			--	0.3	
<i>Orthocladius dubitatus</i>	09021011050103	0.67			--	0.2	
<i>Parametriocnemus</i>	09021011053	8.67	8.97	5	CG	2.0	2.1
<i>Rheocricotopus</i>	09021011057	1.33	1.38	6	CG	0.3	0.3
<i>Thienemanniella</i>	09021011062	2.00	2.07	6	CG	0.5	0.5
<i>Tvetenia</i>	09021011065		2.07	5	CG		0.5
<i>Tvetenia paucunca</i>	09021011065114	2.00			--	0.5	
<i>Micropsectra</i>	09021011070	56.00	57.96	7	CG	13.2	13.7
<i>Rheotanytarsus</i>	09021011072		4.83	6	CF		1.1
<i>Rheotanytarsus exiguus group</i>	09021011072127	1.33			CF	0.3	
<i>Rheotanytarsus pellucidus</i>	09021011072128	3.33			CF	0.8	
<i>Stempellinella</i>	09021011074	3.33	3.45	2	--	0.8	0.8
<i>Tanytarsus</i>	09021011076	2.00	2.07	6	CF	0.5	0.5
<i>Microtendipes</i>	09021011094		12.42	6	CF		2.9
<i>Microtendipes pedellus group</i>	09021011094166	6.67			--	1.6	
<i>Microtendipes rydalensis group</i>	09021011094168	5.33			--	1.3	
<i>Phaenopsectra</i>	09021011101	7.33	7.59	7	SC	1.7	1.8
<i>Polypedilum</i>	09021011102		13.80	6	SH		3.3
<i>Polypedilum aviceps</i>	09021011102181	8.00			--	1.9	
<i>Polypedilum laetum</i>	09021011102186	1.33			--	0.3	
<i>Polypedilum tritum</i>	09021011102191	4.00			--	0.9	
<i>Atherix</i>	09021015055	0.33	0.33	2	PR	0.1	0.1
Empididae	09021016			6	--		
<i>Neoplasta</i>	09021016064	1.00	1.00		PR	0.2	0.2
<i>Dubiraphia</i>	09021113064	3.67	3.67	6	--	0.9	0.9
<i>Optioservus</i>	09021113067	0.33	0.33	3	SC	0.1	0.1
<i>Promoresia</i>	09021113069		36.00		--		8.5
<i>Promoresia elegans</i>	09021113069051	0.67			--	0.2	
<i>Promoresia tardella</i>	09021113069052	35.33			--	8.3	
<i>Stenelmis</i>	09021113070		0.33	5	SC		0.1
<i>Stenelmis crenata</i>	09021113070055	0.33			--	0.1	