



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

Station Information

Station Number:	S-194	River Basin:	Kennebec
Waterbody:	East Branch Sebasticook River - Station 194	HUC8 Name:	Lower Kennebec
Town:	Corinna	Latitude:	44 55 14.85 N
Directions:	0.12 KM BELOW EASTLAND WOOLEN MILL SUPERFUND SITE	Longitude:	69 15 37.76 W
		Stream Order:	3

Sample Information

Log Number:	2582	Type of Sample:	ROCK BAG	Date Deployed:	7/25/2017
Subsample Factor:	X4	Replicates:	3	Date Retrieved:	8/22/2017

Classification Attainment

Statutory Class:	C	Final Determination:	C	Date:	4/5/2018
Model Result with $P \geq 0.6$:	C	Reason for Determination:	Model		
Date Last Calculated:	4/2/2018	Comments:			

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.00	Class C	0.97	Class A, B, or C	1.00
Class B	0.02	NA	0.00	Non-Attainment	0.00
<u>B or Better Model</u>				<u>A Model</u>	
Class A or B			0.01	Class A	0.00
Class C or Non-Attainment			0.99	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Mean Abundance	1668.00	18 Relative Abundance Ephemeroptera	0.18
02 Generic Richness	39.00	19 EPT Generic Richness	15.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	304.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	3.48	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	568.53
06 Hilsenhoff Biotic Index	4.71	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.12	28 EP Generic Richness/14	0.36
08 Relative Generic Richness Diptera	0.31	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	200.80		
11 <i>Cheumatopsyche</i> Abundance	561.63		
12 EPT Generic Richness/ Diptera Generic Richness	1.25		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	5.52		
17 Chironomini Abundance (Family Functional Group)	27.61		

Five Most Dominant Taxa		
Rank	Taxon Name	Percent
1	<i>Cheumatopsyche</i>	33.67
2	<i>Hydropsyche</i>	12.04
3	<i>Rheotanytarsus</i>	8.77
4	<i>Simulium</i>	7.51
5	<i>Baetis</i>	6.87



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Station Number: S-194

Town: Corinna

Date Deployed: 7/25/2017

Log Number: 2582

Waterbody: East Branch Sebasticook River - Station 194

Date Retrieved: 8/22/2017

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	23.9 deg C
Dissolved Oxygen:	10.07 mg/l
Dissolved Oxygen Saturation:	118.2 %
Specific Conductance:	159.6 uS/cm
Velocity:	33.5 cm/s
pH:	7.77
Wetted Width:	7.6 m
Bankfull Width:	7.6 m
Depth:	32 cm

Waterbody Information - Retrieval

Temperature:	23 deg C
Dissolved Oxygen:	9.18 mg/l
Dissolved Oxygen Saturation:	106.7 %
Specific Conductance:	160.5 uS/cm
Velocity:	54.9 cm/s
pH:	7.3
Wetted Width:	7.6 m
Bankfull Width:	7.6 m
Depth:	45 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Swamp Hardwood	Open	Rolling
Upland Hardwood		
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Below Wetland	Below In-place Contamination	Boulder 10 %
Superfund Site	Below Road Crossing	Gravel 5 %
		Rubble/Cobble 80 %
		Sand 5 %

Landcover Summary - 2004 Data

Total Area (ac)	6037	High Int. Dev. %	0.7	Water %	1.4	Non-vegetated %	0.4
		Med Int. Dev. %	0.3	Wetland %	12.3	Tilled Agriculture %	11.5
		Low Int. Dev. %	5.6	Upland Woody %	59.7	Grassland %	8.2
		Development %	6.6	Natural %	72.0	Human Altered %	26.7
						Impervious %	3.6

Sample Comments

7/25/17: TWO FISH OBSERVED.

8/22/17: FISH OBSERVED.



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

Station Number: S-194 Waterbody: East Branch Sebasticook River - Station 194 Town: Corinna
Log Number: 2582 Subsample Factor: X4 Replicates: 3 Calculated: 4/2/2018

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Hydra</i>	02010101001	1.33	1.33		PR	0.1	0.1
<i>Girardia</i>	03010102002		53.33		--		3.2
<i>Girardia tigrina</i>	03010102002001	53.33			--	3.2	
<i>Erpobdella</i>	08030203002		1.33		--		0.1
<i>Erpobdella punctata</i>	08030203002001	1.33			--	0.1	
<i>Hyalella</i>	09010203006	6.67	6.67	8	CG	0.4	0.4
<i>Boyeria</i>	09020301004		1.33	2	PR		0.1
<i>Boyeria vinosa</i>	09020301004012	1.33			--	0.1	
Baetidae	09020401	40.00			--	2.4	
<i>Baetis</i>	09020401001	13.33	114.61	4	CG	0.8	6.9
<i>Baetis flavistriga</i>	09020401001004	53.33			--	3.2	
<i>Baetis intercalaris</i>	09020401001008	30.67			--	1.8	
<i>Heterocloeon</i>	09020401005	5.33	10.99	2	SC	0.3	0.7
<i>Heterocloeon curiosum</i>	09020401005020	4.00			--	0.2	
<i>Acerpenna</i>	09020401007	17.33	48.67	5	CG	1.0	2.9
<i>Acerpenna pygmaea</i>	09020401007011	24.00			--	1.4	
<i>Plauditus</i>	09020401012	77.33	91.06		CG	4.6	5.5
<i>Tricorythodes</i>	09020411038	38.67	38.67	4	CG	2.3	2.3
Trichoptera	090206				--		
Philopotamidae	09020601	4.00	4.00		--	0.2	0.2
<i>Chimarra</i>	09020601003	2.67	41.33	2	CF	0.2	2.5
<i>Chimarra obscura</i>	09020601003003	38.67			--	2.3	
Hydropsychidae	09020604	114.67			--	6.9	
<i>Cheumatopsyche</i>	09020604015	477.33	561.63	5	CF	28.6	33.7
<i>Hydropsyche</i>	09020604016	44.00	200.80	4	CF	2.6	12.0
<i>Hydropsyche bronta</i>	09020604016029	4.00			--	0.2	
<i>Hydropsyche morosa</i>	09020604016030	109.33			--	6.6	
<i>Hydropsyche depravata group</i>	09020604016041	10.67			CF	0.6	
<i>Hydropsyche placoda</i>	09020604016059	2.67			--	0.2	
<i>Macrostemum</i>	09020604018		1.57	3	CF		0.1
<i>Macrostemum zebratum</i>	09020604018054	1.33			--	0.1	
<i>Protoptila</i>	09020606022	2.67	2.67	1	SC	0.2	0.2
<i>Hydroptila</i>	09020607026	1.33	1.33	6	P	0.1	0.1
<i>Helicopsyche</i>	09020616070		1.33	3	SC		0.1
<i>Helicopsyche borealis</i>	09020616070137	1.33			--	0.1	
Leptoceridae	09020618				--		
<i>Mystacides</i>	09020618075		1.33	4	CG		0.1



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<i>Mystacides sepulchralis</i>	09020618075147	1.33			--	0.1	
<i>Oecetis</i>	09020618078	5.33	21.33	8	PR	0.3	1.3
<i>Oecetis avara</i>	09020618078153	1.33			--	0.1	
<i>Oecetis persimilis</i>	09020618078157	14.67			--	0.9	
Chironomidae	09021011	6.67			--	0.4	
<i>Nilotanytus</i>	09021011012		5.52	6	PR		0.3
<i>Nilotanytus fimbriatus</i>	09021011012027	5.33			--	0.3	
<i>Potthastia</i>	09021011026		1.38	2	CG		0.1
<i>Potthastia longimana</i>	09021011026046	1.33			--	0.1	
<i>Corynoneura</i>	09021011036	1.33	1.38	7	CG	0.1	0.1
<i>Cricotopus</i>	09021011037		1.38	7	SH		0.1
<i>Cricotopus bicinctus</i>	09021011037057	1.33			--	0.1	
<i>Nanocladius</i>	09021011049	1.33	1.38	3	CG	0.1	0.1
<i>Synorthocladius</i>	09021011061	1.33	1.38	2	CG	0.1	0.1
<i>Thienemanniella</i>	09021011062	2.67	2.76	6	CG	0.2	0.2
<i>Rheotanytarsus</i>	09021011072		146.35	6	CF		8.8
<i>Rheotanytarsus exiguus group</i>	09021011072127	141.33			CF	8.5	
<i>Tanytarsus</i>	09021011076		5.52	6	CF		0.3
<i>Tanytarsus buckleyi</i>	09021011076139	5.33			CF	0.3	
<i>Polypedilum</i>	09021011102		27.61	6	SH		1.7
<i>Polypedilum flavum</i>	09021011102182	26.67			--	1.6	
<i>Simulium</i>	09021012047	17.33	125.33	4	CF	1.0	7.5
<i>Simulium (Eusimulium)</i>	09021012047052	1.33			--	0.1	
<i>Simulium vittatum</i>	09021012047064	85.33			--	5.1	
<i>Simulium venustum/verecundum complex</i>	09021012047072	21.33			CF	1.3	
<i>Hemerodromia</i>	09021016057	10.67	10.67	3	PR	0.6	0.6
<i>Psephenus</i>	09021108058		10.67	4	SC		0.6
<i>Psephenus herricki</i>	09021108058028	10.67			--	0.6	
Elmidae	09021113	1.33			--	0.1	
<i>Dubiraphia</i>	09021113064		1.36	6	--		0.1
<i>Dubiraphia bivittata</i>	09021113064035	1.33			--	0.1	
<i>Macronychus</i>	09021113065		1.36	4	--		0.1
<i>Macronychus glabratus</i>	09021113065040	1.33			--	0.1	
<i>Stenelmis</i>	09021113070	58.67	59.94	5	SC	3.5	3.6
Trombidiformes	090302	1.33	1.33		PR	0.1	0.1
<i>Amnicola</i>	10010104013		54.67		SC		3.3
<i>Amnicola limosus</i>	10010104013018	54.67			--	3.3	



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<i>Helisoma</i>	10010203030		2.67		SC		0.2
<i>Helisoma campanulata</i>	10010203030060	2.67			--	0.2	