

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

Station Information

Station Number: S-72	River Basin: Saco
Waterbody: Presumpscot River - Station 72	HUC8 Name: Presumpscot
Town: Westbrook	Latitude: 43 42 8.59 N
Directions: 3.2 KM BELOW S D WARREN CO.; JUST ABOVE RT. 302 (RIVERTON) BRIDGE	Longitude: 70 19 32.53 W
	Stream Order: 4

Sample Information

Log Number: 2372	Type of Sample: CONE	Date Deployed: 7/20/2015
Subsample Factor: X4	Replicates: 2	Date Retrieved: 8/17/2015

Classification Attainment

Statutory Class: C	Final Determination: B	Date: 3/22/2016
Model Result with $P \geq 0.6$: B	Reason for Determination: Model	
Date Last Calculated: 5/12/2016	Comments:	

Model Probabilities

<u>First Stage Model</u>				<u>C or Better Model</u>	
Class A	0.14	Class C	0.15	Class A, B, or C	1.00
Class B	0.71	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	0.00
Class C or Non-Attainment			0.10	Class B or C or Non-Attainment	1.00

Model Variables

01 Total Mean Abundance	1550.00	18 Relative Abundance Ephemeroptera	0.02
02 Generic Richness	39.00	19 EPT Generic Richness	14.00
03 Plecoptera Mean Abundance	2.00	21 Sum of Abundances: <i>Dicrotendipes</i> ,	0.00
04 Ephemeroptera Mean Abundance	28.00	<i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	
05 Shannon-Wiener Generic Diversity	2.18	23 Relative Generic Richness- Plecoptera	0.03
06 Hilsenhoff Biotic Index	4.57	25 Sum of Abundances: <i>Cheumatopsyche</i> ,	1035.93
07 Relative Abundance - Chironomidae	0.06	<i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	
08 Relative Generic Richness Diptera	0.38	26 Sum of Abundances: <i>Acroneuria</i> ,	12.00
09 <i>Hydropsyche</i> Abundance	48.07	<i>Maccaffertium</i> , <i>Stenonema</i>	
11 <i>Cheumatopsyche</i> Abundance	1009.40	28 EP Generic Richness/14	0.43
12 EPT Generic Richness/ Diptera	0.93	30 Presence of Class A Indicator Taxa/7	0.00

13 Relative Abundance - Oligochaeta	0.00	Five Most Dominant Taxa	
15 Perlidae Mean Abundance (Family Functional Group)	2.00	Rank	Taxon Name
16 Tanypodinae Mean Abundance (Family Functional Group)	12.24		Percent
17 Chironomini Abundance (Family Functional Group)	32.65	1	<i>Cheumatopsyche</i>
		2	<i>Chimarra</i>
		3	<i>Hydropsyche</i>
		4	<i>Amnicola</i>
		5	<i>Rheotanytarsus</i>

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

Station Number: S-72	Town: Westbrook	Date Deployed: 7/20/2015
Log Number: 2372	Waterbody: Presumpscot River - Station 72	Date Retrieved: 8/17/2015

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT

Taxonomist: MICHAEL WINNELL

Waterbody Information - Deployment

Temperature:	24.4 deg C
Dissolved Oxygen:	8.77 mg/l
Dissolved Oxygen Saturation:	
Specific Conductance:	83 uS/cm
Velocity:	
pH:	7.31
Wetted Width:	32 m
Bankfull Width:	34 m
Depth:	300 cm

Waterbody Information - Retrieval

Temperature:	24.7 deg C
Dissolved Oxygen:	8.8 mg/l
Dissolved Oxygen Saturation:	
Specific Conductance:	98.6 uS/cm
Velocity:	
pH:	7.46
Wetted Width:	32 m
Bankfull Width:	34 m
Depth:	300 cm

Water Chemistry - 8/17/2015

Nitrate+nitrite As N	0.04 mg/l	Total Phosphorus	40 ug/l
Total Kjeldahl Nitrogen	0.3 mg/l	Total Suspended Solids	2.6 mg/l
Dissolved Organic Carbon	1.4 mg/l	Total Dissolved Solids	79 mg/l
Orthophosphate As Phosphorus	25 ug/l		

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>
Upland Hardwood	Open	Flat
Urban		
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>
Nps Pollution	Below Point Source	
Urban Runoff		

Landcover Summary - 2004 Data

Sample Comments

7/20/2015: 105% DO. VERY GREEN, ALGAL BLOOM.
8/17/2015: 105.7% DO. ONE CONE DISTURBED.



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

Station Number: S-72

Waterbody: Presumpscot River - Station 72

Town: Westbrook

Log Number: 2372

Subsample Factor: X4

Replicates: 2

Calculated: 5/12/2016

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Rhabditophora	0301	10.00	10.00		--	0.6	0.6
<i>Girardia</i>	03010102002		16.00		--		1.0
<i>Girardia tigrina</i>	03010102002001	16.00			--	1.0	
<i>Pristina</i>	08020202004		2.00		--		0.1
<i>Pristina osborni</i>	08020202004007	2.00			--	0.1	
<i>Erpobdella</i>	08030203002		2.00		--		0.1
<i>Erpobdella punctata</i>	08030203002001	2.00			--	0.1	
<i>Gammarus</i>	09010201003		12.00	4	--		0.8
<i>Gammarus fasciatus</i>	09010201003003	12.00			--	0.8	
Isotomidae	09020102	2.00	2.00		--	0.1	0.1
<i>Acroneuria</i>	09020209042		2.00	0	PR		0.1
<i>Acroneuria abnormis</i>	09020209042121	2.00		0	PR	0.1	
Baetidae	09020401	2.00			--	0.1	
<i>Baetis</i>	09020401001		11.67	4	CG		0.8
<i>Baetis intercalaris</i>	09020401001008	10.00			--	0.6	
<i>Iswaeon</i>	09020401015	2.00	2.33		--	0.1	0.2
<i>Stenacron</i>	09020402014		2.00	7	SC		0.1
<i>Stenacron interpunctatum</i>	09020402014045	2.00			--	0.1	
<i>Maccaffertium</i>	09020402015	4.00	10.00	4	SC	0.3	0.6
<i>Maccaffertium modestum</i>	09020402015051	6.00			--	0.4	
<i>Tricorythodes</i>	09020411038	2.00	2.00	4	CG	0.1	0.1
<i>Chimarra</i>	09020601003	42.00	228.00	2	CF	2.7	14.7
<i>Chimarra aterrima</i>	09020601003002	78.00			--	5.0	
<i>Chimarra obscura</i>	09020601003003	108.00			--	7.0	
<i>Cernotina</i>	09020603006	2.00	2.00		PR	0.1	0.1
<i>Neureclipsis</i>	09020603008	16.00	16.00	7	CF	1.0	1.0
Hydropsychidae	09020604	222.00			--	14.3	
<i>Cheumatopsyche</i>	09020604015	798.00	1009.40	5	CF	51.5	65.1
<i>Hydropsyche</i>	09020604016	22.00	48.07	4	CF	1.4	3.1
<i>Hydropsyche bronta</i>	09020604016029	2.00			--	0.1	
<i>Hydropsyche placoda</i>	09020604016059	14.00			--	0.9	
<i>Macrostemum</i>	09020604018		2.53	3	CF		0.2
<i>Macrostemum zebratum</i>	09020604018054	2.00			--	0.1	
<i>Hydroptila</i>	09020607026	2.00	2.00	6	P	0.1	0.1
Leptoceridae	09020618				--		
<i>Oecetis</i>	09020618078	4.00	8.00	8	PR	0.3	0.5
<i>Oecetis persimilis</i>	09020618078157	4.00			--	0.3	



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

Station Number: S-72	Waterbody: Presumpscot River - Station 72	Town: Westbrook
Log Number: 2372	Subsample Factor: X4	Replicates: 2
		Calculated: 5/12/2016

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Sialis</i>	09020702004	2.00	2.00	4	PR	0.1	0.1
Chironomidae	09021011	2.00			--	0.1	
<i>Conchapelopia</i>	09021011004	2.00	2.04	6	PR	0.1	0.1
<i>Nilotanyus</i>	09021011012		4.08	6	PR		0.3
<i>Nilotanyus fimbriatus</i>	09021011012027	4.00			--	0.3	
<i>Pentaneura</i>	09021011014		4.08	6	PR		0.3
<i>Pentaneura inconspicua</i>	09021011014028	4.00			--	0.3	
<i>Trissopelopia</i>	09021011021		2.04		PR		0.1
<i>Trissopelopia ogemawi</i>	09021011021042	2.00			--	0.1	
<i>Cricotopus</i>	09021011037		6.12	7	SH		0.4
<i>Cricotopus bicinctus</i>	09021011037057	4.00			--	0.3	
<i>Cricotopus vierriensis</i>	09021011037071	2.00			--	0.1	
<i>Rheocricotopus</i>	09021011057		2.04	6	CG		0.1
<i>Rheocricotopus robacki</i>	09021011057105	2.00			--	0.1	
<i>Tvetenia</i>	09021011065		4.08	5	CG		0.3
<i>Tvetenia vitracies</i>	09021011065113	4.00			--	0.3	
<i>Rheotanytarsus</i>	09021011072		22.45	6	CF		1.4
<i>Rheotanytarsus exiguus group</i>	09021011072127	22.00			CF	1.4	
<i>Tanytarsus</i>	09021011076	20.00	20.41	6	CF	1.3	1.3
<i>Microtendipes</i>	09021011094		2.04	6	CF		0.1
<i>Microtendipes pedellus group</i>	09021011094166	2.00			--	0.1	
<i>Paralauterborniella</i>	09021011099		2.04	8	CG		0.1
<i>Paralauterborniella nigrohalteralis</i>	09021011099175	2.00			--	0.1	
<i>Phaenopsectra</i>	09021011101		8.16	7	SC		0.5
<i>Phaenopsectra obediens</i>	09021011101182	8.00			SC	0.5	
<i>Polypedilum</i>	09021011102		20.41	6	SH		1.3
<i>Polypedilum aviceps</i>	09021011102181	8.00			--	0.5	
<i>Polypedilum flavum</i>	09021011102182	6.00			--	0.4	
<i>Polypedilum ontario</i>	09021011102194	4.00			--	0.3	
<i>Polypedilum illinoense</i>	09021011102204	2.00			--	0.1	
<i>Simulium</i>	09021012047		10.00	4	CF		0.6
<i>Simulium fibrinflatum</i>	09021012047059				--		
<i>Simulium jenningsi</i>	09021012047060				--		
<i>Simulium penobscotensis</i>	09021012047063				--		
<i>Simulium jenningsi species group</i>	09021012047070	10.00			CF	0.6	
<i>Hemerodromia</i>	09021016057	2.00	2.00	3	PR	0.1	0.1
Elmidae	09021113	2.00	2.00		--	0.1	0.1
<i>Amnicola</i>	10010104013		34.00		SC		2.2



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

Station Number: S-72

Waterbody: Presumpscot River - Station 72

Town: Westbrook

Log Number: 2372

Subsample Factor: X4

Replicates: 2

Calculated: 5/12/2016

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
<i>Amnicola limosus</i>	10010104013018	34.00			--	2.2	
Basommatophora	100102	6.00	6.00		--	0.4	0.4
Sphaeriidae	10020201	4.00	4.00		CF	0.3	0.3