



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

**Station Information**

|   |  |
|---|--|
| <b>Station Number:</b> S-954  | River Basin: Androscoggin                  |
| Waterbody: Androscoggin River - Station 954   | HUC8 Name: Lower Androscoggin              |
| Town: Brunswick   | Latitude: 43 57 19.82 N                    |
| Directions: BELOW PEJEPSCOT DAM; UP RIVER RD FROM<br>BRUNSWICK TO PUBLIC FISHING PARK ACCESS<br>AND CANOE PORTAGE | Longitude: 70 1 26.95 W<br>Stream Order: 5 |

**Sample Information**

|                         |                             |                           |
|-------------------------|-----------------------------|---------------------------|
| <b>Log Number:</b> 2716 | Type of Sample: ROCK BASKET | Date Deployed: 8/2/2018   |
| Subsample Factor: X1    | Replicates: 3               | Date Retrieved: 8/29/2018 |

**Classification Attainment**

|                                    |  |                  |
|------------------------------------|--|------------------|
| <b>Statutory Class:</b> C          | <b>Final Determination:</b> A          | Date: 11/30/2018 |
| Model Result with $P \geq 0.6$ : A | <b>Reason for Determination:</b> Model |                  |
| Date Last Calculated: 11/29/2018   | Comments:                              |                  |

**Model Probabilities**

|                           |      |                                |      |
|---------------------------|------|--------------------------------|------|
| <u>First Stage Model</u>  |      | <u>C or Better Model</u>       |      |
| Class A                   | 0.49 | Class C                        | 0.02 |
| Class B                   | 0.48 | NA                             | 0.00 |
| <u>B or Better Model</u>  |      | <u>A Model</u>                 |      |
| Class A or B              | 1.00 | Class A                        | 0.75 |
| Class C or Non-Attainment | 0.00 | Class B or C or Non-Attainment | 0.25 |

**Model Variables**

|  |        |   |       |
|--|--------|---|-------|
| 01 Total Mean Abundance                                    | 569.00 | 18 Relative Abundance Ephemeroptera   | 0.17  |
| 02 Generic Richness  | 42.00  | 19 EPT Generic Richness   | 21.00 |
| 03 Plecoptera Mean Abundance                               | 5.67   | 21 Sum of Abundances: <i>Dicrotendipes</i> ,<br><i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i> | 0.33  |
| 04 Ephemeroptera Mean Abundance                            | 98.67  | 23 Relative Generic Richness- Plecoptera  | 0.05  |
| 05 Shannon-Wiener Generic Diversity                        | 3.53   | 25 Sum of Abundances: <i>Cheumatopsyche</i> ,<br><i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>     | 35.67 |
| 06 Hilsenhoff Biotic Index                                 | 4.15   | 26 Sum of Abundances: <i>Acroneuria</i> ,<br><i>Maccaffertium</i> , <i>Stenonema</i>                            | 34.67 |
| 07 Relative Abundance - Chironomidae                       | 0.11   | 28 EP Generic Richness/14   | 0.79  |
| 08 Relative Generic Richness Diptera                       | 0.29   | 30 Presence of Class A Indicator Taxa/7   | 0.29  |
| 09 <i>Hydropsyche</i> Abundance                            | 178.33 |   |       |
| 11 <i>Cheumatopsyche</i> Abundance                         | 24.00  |   |       |
| 12 EPT Generic Richness/ Diptera<br>Generic Richness       | 1.75   |   |       |
| 13 Relative Abundance - Oligochaeta                        | 0.00   |   |       |
| 15 Perlidae Mean Abundance (Family<br>Functional Group)    | 5.67   |   |       |
| 16 Tanypodinae Mean Abundance<br>(Family Functional Group) | 2.00   |   |       |
| 17 Chironomini Abundance (Family<br>Functional Group)      | 5.33   |   |       |

**Five Most Dominant Taxa**

|      |                        |         |
|------|------------------------|---------|
| Rank | Taxon Name             | Percent |
| 1    | <i>Hydropsyche</i>     | 31.34   |
| 2    | <i>Simulium</i>        | 19.98   |
| 3    | <i>Maccaffertium</i>   | 5.62    |
| 4    | <i>Thienemanniella</i> | 5.45    |
| 5    | <i>Baetis</i>          | 4.28    |



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**Station Number: S-954**      Town: Brunswick      Date Deployed: 8/2/2018  
**Log Number: 2716**      Waterbody: Androscoggin River - Station 954      Date Retrieved: 8/29/2018

**Sample Collection and Processing Information**

Sampling Organization: NORMANDEAU ASSOCIATES      Taxonomist: NORMANDEAU ASSOCIATES

**Waterbody Information - Deployment**

Temperature: 25.9 deg C  
Dissolved Oxygen: 8.21 mg/l  
Dissolved Oxygen Saturation: 101.3 %  
Specific Conductance: 106 uS/cm  
Velocity: 37.9 cm/s  
pH: 7.09  
Wetted Width: 81.1 m  
Bankfull Width: 90.5 m  
Depth: 97 cm

**Waterbody Information - Retrieval**

Temperature: 25.2 deg C  
Dissolved Oxygen: 7.97 mg/l  
Dissolved Oxygen Saturation: 96.9 %  
Specific Conductance: 93 uS/cm  
Velocity: 45.4 cm/s  
pH: 6.95  
Wetted Width: 80.8 m  
Bankfull Width: 88.4 m  
Depth: 97 cm

**Water Chemistry**

**Summary of Habitat Characteristics**

|                           |                     |                  |      |
|---------------------------|---------------------|------------------|------|
| <u>Landuse Name</u>       | <u>Canopy Cover</u> | <u>Terrain</u>   |      |
| Upland Conifer            | Open                | Flat             |      |
| Upland Hardwood           |                     |                  |      |
| <u>Potential Stressor</u> | <u>Location</u>     | <u>Substrate</u> |      |
| Regulated Flows           | Below Dam           | Boulder          | 50 % |
|                           | Main Stem           | Rubble/Cobble    | 40 % |
|                           |                     | Sand             |      |

**Landcover Summary - 2004 Data**

**Sample Comments**



**Maine Department of Environmental Protection  
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Aquatic Life Taxonomic Inventory Report**

**Station Number: S-954**  
**Log Number: 2716**

Waterbody: Androscoggin River - Station 954  
Subsample Factor: X1

Town: Brunswick  
Calculated: 11/29/2018

| Taxon                        | Maine Taxonomic Code | Count<br>(Mean of Samplers) |          | Hilsenhoff Biotic Index | Functional Feeding Group | Relative Abundance % |          |
|------------------------------|----------------------|-----------------------------|----------|-------------------------|--------------------------|----------------------|----------|
|                              |                      | Actual                      | Adjusted |                         |                          | Actual               | Adjusted |
| DugesIIDae                   | 03010102             | 8.33                        | 8.33     |                         | --                       | 1.5                  | 1.5      |
| Nematoda                     | 05                   | 0.33                        | 0.33     |                         | --                       | 0.1                  | 0.1      |
| <i>Stylaria</i>              | 08020202014          |                             | 0.33     |                         | CG                       |                      | 0.1      |
| <i>Stylaria fossularis</i>   | 08020202014001       | 0.33                        |          |                         | --                       | 0.1                  |          |
| <i>Hyaella</i>               | 09010203006          |                             | 0.33     | 8                       | CG                       |                      | 0.1      |
| <i>Hyaella azteca</i>        | 09010203006011       | 0.33                        |          |                         | --                       | 0.1                  |          |
| <i>Acroncuria</i>            | 09020209042          | 2.67                        | 2.67     | 0                       | PR                       | 0.5                  | 0.5      |
| <i>Paragnetina</i>           | 09020209049          |                             | 3.00     | 1                       | PR                       |                      | 0.5      |
| <i>Paragnetina media</i>     | 09020209049151       | 3.00                        |          |                         | --                       | 0.5                  |          |
| <i>Boyeria</i>               | 09020301004          |                             | 0.67     | 2                       | PR                       |                      | 0.1      |
| <i>Boyeria vinosa</i>        | 09020301004012       | 0.67                        |          |                         | --                       | 0.1                  |          |
| <i>Argia</i>                 | 09020309048          | 0.33                        | 0.33     | 7                       | PR                       | 0.1                  | 0.1      |
| <i>Baetis</i>                | 09020401001          | 24.33                       | 24.33    | 4                       | CG                       | 4.3                  | 4.3      |
| <i>Heterocloeon</i>          | 09020401005          | 5.00                        | 5.00     | 2                       | SC                       | 0.9                  | 0.9      |
| <i>Acerpenna</i>             | 09020401007          |                             | 24.00    | 5                       | CG                       |                      | 4.2      |
| <i>Acerpenna pygmaea</i>     | 09020401007011       | 24.00                       |          |                         | --                       | 4.2                  |          |
| <i>Acentrella</i>            | 09020401008          | 0.67                        | 0.67     | 3                       | CG                       | 0.1                  | 0.1      |
| <i>Plauditus</i>             | 09020401012          | 0.33                        | 0.33     |                         | CG                       | 0.1                  | 0.1      |
| <i>Leucrocuta</i>            | 09020402011          | 0.33                        | 0.33     | 1                       | SC                       | 0.1                  | 0.1      |
| <i>Maccaffertium</i>         | 09020402015          | 30.33                       | 32.00    | 4                       | SC                       | 5.3                  | 5.6      |
| <i>Maccaffertium exiguum</i> | 09020402015046       | 1.67                        |          |                         | --                       | 0.3                  |          |
| <i>Isonychia</i>             | 09020404018          | 11.67                       | 11.67    | 2                       | CF                       | 2.1                  | 2.1      |
| <i>Tricorythodes</i>         | 09020411038          | 0.33                        | 0.33     | 4                       | CG                       | 0.1                  | 0.1      |
| <i>Chimarra</i>              | 09020601003          | 24.00                       | 24.00    | 2                       | CF                       | 4.2                  | 4.2      |
| <i>Nyctiophylax</i>          | 09020603009          | 0.67                        | 0.67     | 5                       | PR                       | 0.1                  | 0.1      |
| <i>Polycentropus</i>         | 09020603010          | 9.67                        | 9.67     | 6                       | PR                       | 1.7                  | 1.7      |
| <i>Cheumatopsyche</i>        | 09020604015          | 24.00                       | 24.00    | 5                       | CF                       | 4.2                  | 4.2      |
| <i>Hydropsyche</i>           | 09020604016          | 4.33                        | 178.33   | 4                       | CF                       | 0.8                  | 31.3     |
| <i>Hydropsyche morosa</i>    | 09020604016030       | 5.00                        |          |                         | --                       | 0.9                  |          |
| <i>Hydropsyche phalerata</i> | 09020604016047       | 169.00                      |          |                         | --                       | 29.7                 |          |
| <i>Macrostemum</i>           | 09020604018          | 23.33                       | 23.33    | 3                       | CF                       | 4.1                  | 4.1      |
| <i>Hydroptila</i>            | 09020607026          | 4.33                        | 4.33     | 6                       | P                        | 0.8                  | 0.8      |
| <i>Ceraclea</i>              | 09020618072          | 5.67                        | 5.67     | 3                       | CG                       | 1.0                  | 1.0      |
| <i>Nectopsyche</i>           | 09020618074          | 0.67                        | 0.67     | 3                       | SH                       | 0.1                  | 0.1      |
| <i>Oecetis</i>               | 09020618078          | 2.33                        | 2.33     | 8                       | PR                       | 0.4                  | 0.4      |
| <i>Nilotanypus</i>           | 09021011012          | 1.67                        | 1.67     | 6                       | PR                       | 0.3                  | 0.3      |
| <i>Thienemannimyia</i>       | 09021011020          |                             | 0.33     | 3                       | PR                       |                      | 0.1      |



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Town: Brunswick

**Log Number: 2716**

Subsample Factor: X1

Replicates: 3

Calculated: 11/29/2018

| Taxon                               | Maine Taxonomic Code | Count<br>(Mean of Samplers) |          | Hilsenhoff Biotic Index | Functional Feeding Group | Relative Abundance % |          |
|-------------------------------------|----------------------|-----------------------------|----------|-------------------------|--------------------------|----------------------|----------|
|                                     |                      | Actual                      | Adjusted |                         |                          | Actual               | Adjusted |
| <i>Thienemannimyia group</i>        | 09021011020041       | 0.33                        |          |                         | --                       | 0.1                  |          |
| <i>Diamesa</i>                      | 09021011024          | 0.33                        | 0.33     | 5                       | CG                       | 0.1                  | 0.1      |
| <i>Potthastia</i>                   | 09021011026          |                             | 0.67     | 2                       | CG                       |                      | 0.1      |
| <i>Potthastia gaedii</i>            | 09021011026045       | 0.67                        |          |                         | --                       | 0.1                  |          |
| <i>Cricotopus</i>                   | 09021011037          | 11.33                       | 11.33    | 7                       | SH                       | 2.0                  | 2.0      |
| <i>Thienemanniella</i>              | 09021011062          | 31.00                       | 31.00    | 6                       | CG                       | 5.4                  | 5.4      |
| <i>Tvetenia</i>                     | 09021011065          |                             | 5.00     | 5                       | CG                       |                      | 0.9      |
| <i>Tvetenia vitracies</i>           | 09021011065113       | 5.00                        |          |                         | --                       | 0.9                  |          |
| <i>Rheotanytarsus</i>               | 09021011072          |                             | 5.67     | 6                       | CF                       |                      | 1.0      |
| <i>Rheotanytarsus exiguus group</i> | 09021011072127       | 3.00                        |          |                         | CF                       | 0.5                  |          |
| <i>Rheotanytarsus pellucidus</i>    | 09021011072128       | 2.67                        |          |                         | CF                       | 0.5                  |          |
| <i>Tanytarsus</i>                   | 09021011076          | 0.33                        | 0.33     | 6                       | CF                       | 0.1                  | 0.1      |
| <i>Dicrotendipes</i>                | 09021011085          | 0.33                        | 0.33     | 8                       | CG                       | 0.1                  | 0.1      |
| <i>Polypedilum</i>                  | 09021011102          |                             | 5.00     | 6                       | SH                       |                      | 0.9      |
| <i>Polypedilum flavum</i>           | 09021011102182       | 3.33                        |          |                         | --                       | 0.6                  |          |
| <i>Polypedilum illinoense group</i> | 09021011102185       | 1.67                        |          |                         | --                       | 0.3                  |          |
| <i>Simulium</i>                     | 09021012047          | 113.67                      | 113.67   | 4                       | CF                       | 20.0                 | 20.0     |
| <i>Stenelmis</i>                    | 09021113070          |                             | 0.33     | 5                       | SC                       |                      | 0.1      |
| <i>Stenelmis crenata</i>            | 09021113070055       | 0.33                        |          |                         | --                       | 0.1                  |          |
| Hydrachnidia                        | 09030101             | 0.33                        | 0.33     |                         | --                       | 0.1                  | 0.1      |
| <i>Amnicola</i>                     | 10010104013          | 5.33                        | 5.33     |                         | SC                       | 0.9                  | 0.9      |