

**City of Winnipeg  
Water and Waste Department**

**2013 SMALL STREAMS SURVEY MONITORING REPORT**

| Survey Date <sup>1</sup> :        | August 14, 2013 | Small Streams Sampling Locations |                                     |                                  |                                    |                                   |                               |                                |                                 |
|-----------------------------------|-----------------|----------------------------------|-------------------------------------|----------------------------------|------------------------------------|-----------------------------------|-------------------------------|--------------------------------|---------------------------------|
| Parameter                         | Unit            | SEINE RIVER<br>@ HWY 59          | SEINE RIVER @<br>PROVENCHER<br>BLVD | STURGEON<br>CREEK @<br>PERIMETER | STURGEON<br>CREEK @<br>PORTAGE AVE | OMANDS CREEK<br>@ PORTAGE<br>AVE. | LA SALLE<br>RIVER @ HWY<br>75 | BUNNS CREEK<br>@ BONNER<br>AVE | TRURO CREEK<br>@ PORTAGE<br>AVE |
| Temperature                       | ° C             | 19.3                             | 19.5                                | 20.3                             | 20.2                               | 19.4                              | 22.7                          | NS                             | 15.8                            |
| Dissolved Oxygen                  | mg/L            | 8.4                              | 7.2                                 | 11.1                             | 10.0                               | 6.2                               | 7.7                           | NS                             | 5.8                             |
| Oxygen Saturation <sup>2</sup>    | %               | 92                               | 79                                  | 124                              | 111                                | 68                                | 90                            | NS                             | 59                              |
| pH                                | units           | 8.18                             | 8.06                                | 8.16                             | 8.11                               | 7.57                              | 8.08                          | NS                             | 7.59                            |
| Total Solids                      | mg/L            | 378                              | 416                                 | 1300                             | 1450                               | 852                               | 628                           | NS                             | 544                             |
| Total Suspended Solids            | mg/L            | 32                               | 36                                  | 4                                | 7                                  | 6                                 | 52                            | NS                             | <4                              |
| Turbidity                         | n.t.u.          | 27.5                             | 30.0                                | 4.1                              | 6.7                                | 6.2                               | 43.0                          | NS                             | 2.3                             |
| Total Organic Carbon              | mg/L            | 16                               | 17                                  | 6                                | 7                                  | 15                                | 15                            | NS                             | 15                              |
| Chlorophyll a                     | ug/L            | 3                                | 5                                   | <1                               | 2                                  | 7                                 | 6                             | NS                             | <1                              |
| Ammonia Nitrogen                  | mg/L N          | 0.065                            | <0.003                              | <0.003                           | 0.006                              | <0.003                            | 0.023                         | NS                             | <0.003                          |
| Nitrate Nitrogen                  | mg/L N          | 0.016                            | 0.004                               | 0.005                            | 0.104                              | <0.003                            | <0.003                        | NS                             | 0.163                           |
| Total Kjeldahl Nitrogen           | mg/L N          | <2.0                             | <2.0                                | <2.0                             | <2.0                               | <2.0                              | <2.0                          | NS                             | <2.0                            |
| Total Nitrogen <sup>2</sup>       | mg/L N          | <2.0                             | <2.0                                | <2.0                             | <2.0                               | <2.0                              | <2.0                          | NS                             | <2.0                            |
| Soluble Phosphorus                | mg/L P          | 0.06                             | 0.06                                | <0.01                            | <0.01                              | 0.06                              | 0.59                          | NS                             | 0.12                            |
| Total Phosphorus                  | mg/L P          | <0.30                            | <0.30                               | <0.30                            | <0.30                              | <0.30                             | 0.90                          | NS                             | <0.30                           |
| Escherichia Coliform <sup>3</sup> | MPN/100 mL      | 43                               | 23                                  | 930                              | 46000                              | 1500                              | 93                            | NS                             | 24000                           |
| Fecal Coliform <sup>3</sup>       | MPN/100 mL      | 43                               | 150                                 | 930                              | 46000                              | 3800                              | 230                           | NS                             | 24000                           |

Weather Conditions during monitoring: Winds S at 4 km/hr with 40 % cloud cover and 0 mm of precipitation. Average air temperature during survey at 20°C

- Notes:
- 1) LIMS Reference No: 36787
  - 2) Calculated values
  - 3) Analysed by contract laboratory.
  - 4) No sample for Bunns Creek at Bonner Avenue due to no flow.

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Date Approved: 17-Sep-13

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