## City of Winnipeg Water and Waste Department

## 2011 SMALL STREAMS SURVEY MONITORING REPORT

| Survey Date <sup>1</sup> :        | July 13, 2011 | Small Streams Sampling Locations |  |   |                                    |  |                               |                                |  |  |
|-----------------------------------|---------------|----------------------------------|--|---|------------------------------------|--|-------------------------------|--------------------------------|--|--|
| Parameter                         | Unit          | SEINE RIVER<br>@ HWY 59          | SEINE RIVER<br>@<br>PROVENCHER<br>BLVD | STURGEON<br>CREEK @<br>PERIMETER <sup>4</sup> | STURGEON<br>CREEK @<br>PORTAGE AVE | OMANDS CREEK<br>@ PORTAGE<br>AVE. <sup>5</sup> | LA SALLE<br>RIVER @ HWY<br>75 | BUNNS CREEK<br>@ BONNER<br>AVE | TRURO CREEK<br>@ PORTAGE<br>AVE <sup>4</sup> |  |
| Temperature                       | ° C           | 19.3                             | 21.4                                   | NS  | 20.6                               | NS   | 22.6                          | 19.3                           | NS   |  |
| Dissolved Oxygen                  | mg/L          | 8.7                              | 4.5                                    | NS  | 14.2                               | NS   | 7.3                           | 5.1                            | NS   |  |
| Oxygen Saturation <sup>2</sup>    | %             | 95                               | 51                                     | NS  | 159                                | NS   | 86                            | 56                             | NS   |  |
| pН                                | units         | 8.28                             | 7.74                                   | NS  | 8.98                               | NS   | 7.95                          | 8.79                           | NS   |  |
| Total Solids                      | mg/L          | 552                              | 460                                    | NS  | 288                                | NS   | 796                           | 1270                           | NS   |  |
| Total Suspended Solids            | mg/L          | 135                              | 11                                     | NS  | 48                                 | NS   | 62                            | 41                             | NS   |  |
| Turbidity                         | n.t.u.        | 108                              | 6.54                                   | NS  | 21.4                               | NS   | 20.2                          | 10.5                           | NS   |  |
| Total Organic Carbon              | mg/L          | 25                               | 22                                     | NS  | 26                                 | NS   | 22                            | 20                             | NS   |  |
| Chlorophyll a                     | ug/L          | 4                                | 4                                      | NS  | 68                                 | NS   | 18                            | 4                              | NS   |  |
| Ammonia Nitrogen                  | mg/L N        | 0.014                            | 0.078                                  | NS  | <0.003                             | NS   | 0.093                         | 0.077                          | NS   |  |
| Nitrate Nitrogen                  | mg/L N        | 0.118                            | 0.087                                  | NS  | <0.003                             | NS   | 7.420                         | 0.141                          | NS   |  |
| Total Kjeldahl Nitrogen           | mg/L N        | <2.0                             | <2.0                                   | NS  | <2.0                               | NS   | <2.0                          | <2.0                           | NS   |  |
| Total Nitrogen <sup>2</sup>       | mg/L N        | <2.0                             | <2.0                                   | NS  | <2.0                               | NS   | 8.4                           | <2.0                           | NS   |  |
| Soluble Phosphorus                | mg/L P        | 0.08                             | 0.29                                   | NS  | <0.01                              | NS   | 0.28                          | 0.44                           | NS   |  |
| Total Phosphorus                  | mg/L P        | <0.30                            | 0.30                                   | NS  | <0.30                              | NS   | 0.30                          | 0.60                           | NS   |  |
| Escherichia Coliform <sup>3</sup> | MPN/100 mL    | 43                               | 93                                     | NS  | 930                                | NS   | 230                           | 150                            | NS   |  |
| Fecal Coliform <sup>3</sup>       | MPN/100 mL    | 43                               | 93                                     | NS  | 930                                | NS   | 230                           | 150                            | NS   |  |

Weather Conditions during monitoring: Winds S at 33 km/hr with 5% cloud cover. Average air temperature during survey at 21.8°C.

| Notes: | 1)<br>2)  | LIMS Reference No: 30128<br>Calculated values. Oxygen saturation data was revised on | Rep      | ort Compiled By: | J. Jones<br>Compliance Reporting Technician |
|--------|---|--|----------|------------------|---|
|        | 3)  | May 15, 2012.<br>Analysed by contract laboratory.                                    | Appr     | oved in LIMS By: | S. Fletcher                                 |
|        | 4)  | There are no samples for Sturgeron Creek at the Perimeter and                        |          |                  | Supervisor of Analytical Services           |
|        | <ul><li>Truro Creek at Portage Ave. because the locations were not accessible.</li><li>5) Data was revised on May 15, 2012 for the Omands Creek at Portage Ave sample location.</li></ul> |  |          | Date Approved:   | 15-May-12                                   |
|        |   | The results were not representative due to low flow conditions.                      |          |                  |   |
|        |   |  | File No: | 040-14-09-03-00  |   |