

**City of Winnipeg  
Water and Waste Department**

**2012 SMALL STREAMS SURVEY MONITORING REPORT**

| Survey Date <sup>1</sup> : May 23, 2012 |            | Small Streams Sampling Locations |                               |                            |                              |                             |                         |                          |                           |
|---|------------|----------------------------------|-------------------------------|----------------------------|------------------------------|-----------------------------|-------------------------|--------------------------|---------------------------|
| Parameter                               | Unit       | SEINE RIVER @ HWY 59             | SEINE RIVER @ PROVENCHER BLVD | STURGEON CREEK @ PERIMETER | STURGEON CREEK @ PORTAGE AVE | OMANDS CREEK @ PORTAGE AVE. | LA SALLE RIVER @ HWY 75 | BUNNS CREEK @ BONNER AVE | TRURO CREEK @ PORTAGE AVE |
| Temperature                             | ° C        | 16.9                             | 16.1                          | 16.5                       | 15.6                         | 15.4                        | 17.6                    | 16.1                     | 14.9                      |
| Dissolved Oxygen                        | mg/L       | 8.4                              | 7.4                           | 12.1                       | 7.8                          | 8.0                         | 11.1                    | 9.5                      | 8.7                       |
| Oxygen Saturation <sup>2</sup>          | %          | 87                               | 75                            | 125                        | 78                           | 80                          | 117                     | 97                       | 87                        |
| pH <sup>4</sup>                         | units      | 7.99                             | 8.02                          | 8.28                       | 8.00                         | 7.65                        | 9.01                    | 8.77                     | 8.08                      |
| Total Solids                            | mg/L       | 338                              | 336                           | 1600                       | 824                          | 960                         | 644                     | 806                      | 474                       |
| Total Suspended Solids                  | mg/L       | 67                               | 32                            | 14                         | 4                            | <4                          | 39                      | 24                       | <4                        |
| Turbidity                               | n.t.u.     | 69.4                             | 36.6                          | 15.4                       | 5.3                          | 6.5                         | 26.3                    | 19.2                     | 3.4                       |
| Total Organic Carbon                    | mg/L       | 16                               | 15                            | 9                          | 9                            | 16                          | 10                      | 14                       | 10                        |
| Chlorophyll a                           | ug/L       | 2                                | 4                             | 1                          | 3                            | 4                           | 43                      | 16                       | 1                         |
| Ammonia Nitrogen                        | mg/L N     | 0.046                            | 0.061                         | 0.054                      | 0.651                        | 0.021                       | 0.862                   | 0.057                    | 0.013                     |
| Nitrate Nitrogen                        | mg/L N     | 0.158                            | 0.309                         | 0.016                      | 0.349                        | 0.134                       | 0.006                   | 0.088                    | 0.090                     |
| Total Kjeldahl Nitrogen                 | mg/L N     | <2.0                             | <2.0                          | <2.0                       | <2.0                         | <2.0                        | <2.0                    | <2.0                     | <2.0                      |
| Total Nitrogen <sup>2</sup>             | mg/L N     | <2.0                             | <2.0                          | <2.0                       | <2.0                         | <2.0                        | <2.0                    | <2.0                     | <2.0                      |
| Soluble Phosphorus                      | mg/L P     | 0.10                             | 0.08                          | 0.02                       | 0.10                         | 0.11                        | 0.21                    | 0.06                     | 0.05                      |
| Total Phosphorus                        | mg/L P     | <0.30                            | <0.30                         | <0.30                      | <0.30                        | <0.30                       | 0.40                    | <0.30                    | <0.30                     |
| Escherichia Coliform <sup>3</sup>       | MPN/100 mL | 23                               | 430                           | <3                         | 930                          | 230                         | 9                       | 430                      | 150                       |
| Fecal Coliform <sup>3</sup>             | MPN/100 mL | 23                               | 430                           | <3                         | 930                          | 430                         | 9                       | 430                      | 150                       |

Weather Conditions during monitoring: Winds WSW at 27 km/hr with 80 % cloud cover. Average air temperature during survey at 17.2 °C

- Notes:
- 1) LIMS Reference No: 32807
  - 2) Calculated values
  - 3) Analysed by contract laboratory.
  - 4) Bunn's Creek at Bonner Ave, Omand's Creek at Portage Ave, and Seine River at Provencher Ave samples were analyzed for pH in the field as usual. All other samples were analyzed for pH back in the lab due to a malfunction of the field pH probe.

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