

**City of Winnipeg
Water and Waste Department**

2011 SMALL STREAMS SURVEY MONITORING REPORT

| Survey Date ¹ : | August 24, 2011 | Small Streams Sampling Locations | | | | | | | |
|-----------------------------------|-----------------|----------------------------------|-------------------------------------|---|------------------------------------|-----------------------------------|-------------------------------|--------------------------------|---------------------------------|
| Parameter | Unit | SEINE RIVER @ HWY 59 | SEINE RIVER @ PROVENCHER BLVD | STURGEON CREEK @ PERIMETER ⁴ | STURGEON CREEK @ PORTAGE AVE | OMANDS CREEK @ PORTAGE AVE. | LA SALLE RIVER @ HWY 75 | BUNNS CREEK @ BONNER AVE | TRURO CREEK @ PORTAGE AVE |
| Temperature | ° C | 19.5 | 21.0 | NS | 21.0 | 20.8 | 21.5 | 19.4 | 18.9 |
| Dissolved Oxygen | mg/L | 6.8 | 4.9 | NS | 7.3 | 7.2 | 7.0 | 5.7 | 5.9 |
| Oxygen Saturation ² | % | 74 | 56 | NS | 82 | 81 | 80 | 62 | 64 |
| pH | units | 8.13 | 7.65 | NS | 8.12 | 7.78 | 8.28 | 8.67 | 7.69 |
| Total Solids | mg/L | 452 | 432 | NS | 1410 | 588 | 884 | 1120 | 1080 |
| Total Suspended Solids | mg/L | 53 | 32 | NS | 34 | 31 | 32 | 164 | 22 |
| Turbidity | n.t.u. | 41.8 | 17.8 | NS | 17.2 | 14.8 | 21.3 | 105 | 10.1 |
| Total Organic Carbon | mg/L | 17 | 16 | NS | 10 | 11 | 27 | 35 | 19 |
| Chlorophyll a | ug/L | 11 | 9 | NS | 44 | 1 | 4 | 122 | 53 |
| Ammonia Nitrogen | mg/L N | 0.009 | 0.023 | NS | 0.041 | 0.023 | 0.017 | <0.003 | 0.096 |
| Nitrate Nitrogen | mg/L N | 0.006 | <0.003 | NS | 0.093 | <0.003 | <0.003 | <0.003 | 0.034 |
| Total Kjeldahl Nitrogen | mg/L N | <2.0 | <2.0 | NS | <2.0 | <2.0 | <2.0 | 3.0 | <2.0 |
| Total Nitrogen ² | mg/L N | <2.0 | <2.0 | NS | <2.0 | <2.0 | <2.0 | 3.0 | <2.0 |
| Soluble Phosphorus | mg/L P | 0.06 | 0.22 | NS | 0.12 | 0.26 | 0.65 | 0.35 | 0.21 |
| Total Phosphorus | mg/L P | <0.30 | <0.30 | NS | <0.30 | 0.40 | 0.80 | 0.90 | 0.40 |
| Escherichia Coliform ³ | MPN/100 mL | 150 | 2300 | NS | 380 | 2300 | 93 | 430 | 750 |
| Fecal Coliform ³ | MPN/100 mL | 150 | 2300 | NS | 380 | 2300 | 93 | 430 | 750 |

Weather Conditions during monitoring: Winds NW at 57 km/hr with no cloud cover. Average air temperature during survey at 21.8°C.

- Notes:
- 1) LIMS Reference No: 30570
 - 2) Calculated values. Oxygen saturation data was revised on May 15, 2012.
 - 3) Analysed by contract laboratory.
 - 4) There is no sample for Sturgeon Creek at Perimeter because the location was not accessible.

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