

**City of Winnipeg
Water and Waste Department**

2016 SMALL STREAMS SURVEY MONITORING REPORT

| Survey Date ¹ : April 21, 2016 | | Small Streams Sampling Locations | | | | | | | |
|---|------------|----------------------------------|------------------------------------|---------------------------------|-----------------------------------|---------------------------------|------------------------------|-------------------------------|--------------------------------|
| Parameter | Unit | SEINE RIVER @ HWY 59 (S6) | SEINE RIVER @ PROVENCHER BLVD (S7) | STURGEON CREEK @ PERIMETER (S1) | STURGEON CREEK @ PORTAGE AVE (S2) | OMANDS CREEK @ PORTAGE AVE (S4) | LA SALLE RIVER @ HWY 75 (S5) | BUNNS CREEK @ BONNER AVE (S8) | TRURO CREEK @ PORTAGE AVE (S3) |
| Temperature | ° C | 10.3 | 9.3 | 10.7 | 10.4 | 10.3 | 8.9 | 9.4 | 8.7 |
| Dissolved Oxygen | mg/L | 9.1 | 9.6 | 8.5 | 8.4 | 6.0 | 9.6 | 9.5 | 9.7 |
| Oxygen Saturation | % | 81 | 84 | 77 | 76 | 54 | 83 | 82 | 83 |
| Biochemical Oxygen Demand | mg/L | <3 | <3 | <3 | <3 | nr ³ | <3 | 4 | <3 |
| pH | units | 7.93 | 7.32 | 7.82 | 7.62 | 7.38 | 7.92 | 6.62 | 7.62 |
| Total Solids | mg/L | 490 | 506 | 442 | 468 | 358 | 522 | 752 | 496 |
| Total Suspended Solids | mg/L | 107 | 55 | 72 | 66 | 17 | 106 | 11 | 5 |
| Turbidity | n.t.u. | 78.8 | 44.4 | 85.2 | 78.6 | 46.6 | 162.0 | 11.2 | 4.1 |
| Total Organic Carbon | mg/L | 22 | 22 | 24 | 23 | 21 | 22 | 18 | 20 |
| Chlorophyll a | ug/L | 2 | 9 | 4 | 4 | 4 | 2 | 33 | 4 |
| Ammonia Nitrogen | mg/L N | 0.101 | 0.070 | 0.116 | 0.087 | 0.033 | 0.327 | 0.201 | 0.042 |
| Nitrate Nitrogen | mg/L N | 0.579 | 1.960 | 5.510 | 5.420 | 2.830 | 6.960 | 0.306 | 5.670 |
| Total Kjeldahl Nitrogen | mg/L N | 1.5 | 2.0 | 2.0 | 4.4 | 1.6 | 2.4 | 1.9 | 1.7 |
| Total Nitrogen | mg/L N | 2.1 | 4.0 | 7.5 | 9.8 | 4.4 | 9.4 | 2.2 | 7.4 |
| Soluble Phosphorus | mg/L P | 0.14 | 0.20 | 0.51 | 0.45 | 0.34 | 0.46 | 0.21 | 0.07 |
| Total Phosphorus | mg/L P | 0.50 | 0.50 | 0.80 | 0.80 | 0.50 | 0.80 | 0.40 | 0.30 |
| Escherichia Coliform ² | MPN/100 mL | 23 | 740 | 9 | 9 | 7 | 43 | 43 | 9 |
| Fecal Coliform ² | MPN/100 mL | 43 | 740 | 9 | 23 | 7 | 43 | 43 | 9 |

Weather Conditions during monitoring Winds N at 39 km/hr with 5% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 3.8°C

Notes: 1) LIMS Reference No: 45897
 2) Analysed by contract laboratory.
 3) No result because the initial DO was below the BOD test limit.

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