

**City of Winnipeg
Water and Waste Department**

2011 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : May 11, 2011		Assiniboine River Sampling Locations				Red River Sampling Locations					
Parameter	Unit	HEADINGLY BRIDGE	WEST PERIMETER BRIDGE	ASSINIBOINE PARK FOOT BRIDGE	MAIN STREET BRIDGE	SOUTH FLOODWAY CONTROL ⁴	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	°C	12.3	NS	12.3	12.2	NS	13.2	13.4	12.9	12.6	13.0
Dissolved Oxygen	mg/L	9.9	NS	10.1	10.1	NS	10.4	10.2	10.3	10.5	10.1
Oxygen Saturation ²	%	93	NS	95	94	NS	100	98	98	99	96
pH	units	8.14	NS	8.16	8.15	NS	8.24	8.24	8.21	8.23	8.19
Total Solids	mg/L	736	NS	740	732	NS	560	552	608	600	484
Total Suspended Solids	mg/L	250	NS	240	244	NS	66	72	132	132	122
Turbidity	n.t.u.	128	NS	125	153	NS	49.0	52.0	92.4	90.3	93.9
Total Organic Carbon	mg/L	13	NS	14	13	NS	12	12	13	13	13
Chlorophyll a	ug/L	7	NS	7	9	NS	14	14	14	7	28
Ammonia Nitrogen	mg/L N	0.018	NS	<0.003	0.014	NS	0.034	0.046	0.045	0.110	0.104
Nitrate Nitrogen	mg/L N	0.439	NS	0.433	0.440	NS	0.530	0.557	0.532	0.540	0.562
Total Kjeldahl Nitrogen	mg/L N	<2.0	NS	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	NS	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.06	NS	0.06	0.06	NS	0.11	0.12	0.10	0.11	0.11
Total Phosphorus	mg/L P	<0.30	NS	0.40	0.30	NS	<0.30	<0.30	0.30	0.30	<0.30
Escherichia Coliform ³	colonies/100 mL	4	NS	93	15	NS	20	230	43	230	43
Fecal Coliform ³	colonies/100 mL	9	NS	93	15	NS	20	430	43	230	43

Weather Conditions during monitoring: Winds NW at 33 km/hr with 100% cloud cover. Average air temperature during survey at 5°C.

Notes:

- 1) LIMS Reference No: 29405
- 2) Calculated values
- 3) Analyzed by contract laboratory.
- 4) Red River elevation at South Floodway Control Gates: 746.9 ft
- 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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