

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : November 10, 2010		Assiniboine River Sampling Locations				Red River Sampling Locations					
Parameter	Unit	ASSINIBOINE PARK FOOT BRIDGE	HEADINGLY BRIDGE	MAIN STREET BRIDGE	WEST PERIMETER BRIDGE	SOUTH FLOODWAY CONTROL ⁴	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	6.8	6.7	6.5	NS	NS	6.7	6.6	6.7	7.3	8.9
Dissolved Oxygen	mg/L	12.5	12.5	12.5	NS	NS	11.6	11.7	11.8	11.9	12.0
Oxygen Saturation ²	%	102	102	102	NS	NS	95	95	96	99	104
pH	units	8.34	8.37	8.41	NS	NS	8.02	8.03	8.12	8.06	7.96
Total Solids	mg/L	1040	996	1020	NS	NS	668	684	764	760	756
Total Suspended Solids	mg/L	218	212	198	NS	NS	101	94	124	124	128
Turbidity	n.t.u.	85.5	90.1	74.6	NS	NS	58.3	63.0	75.3	74.9	88.4
Total Organic Carbon	mg/L	15	19	15	NS	NS	14	15	16	15	15
Chlorophyll a	ug/L	9	9	5	NS	NS	4	5	5	5	5
Ammonia Nitrogen	mg/L N	0.010	0.039	<0.003	NS	NS	0.113	0.116	0.083	0.121	0.110
Nitrate Nitrogen	mg/L N	0.388	0.403	0.392	NS	NS	1.600	1.630	1.410	1.460	1.390
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	NS	NS	2.6	2.6	2.4	2.5	2.4
Soluble Phosphorus	mg/L P	0.14	0.16	0.15	NS	NS	0.17	0.17	0.17	0.18	0.17
Total Phosphorus	mg/L P	0.50	0.40	0.50	NS	NS	0.40	0.40	0.40	0.40	0.40
Escherichia Coliform ³	colonies/100 mL	43	23	7	NS	NS	27	23	9	43	23
Fecal Coliform ³	colonies/100 mL	93	43	7	NS	NS	27	23	9	43	23

Weather Conditions during monitoring: Winds S at south 20 km/hr with 100% cloud cover. Average air temperature during survey at 6.6°C

- Notes:
- 1) LIMS Reference No: 27852
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 742.1 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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