

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 13, 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	14.5	14.7	14.1	NS	NS	14.6	14.4	14.2	14.4	14.7
Dissolved Oxygen	mg/L	9.5	9.4	9.4	NS	NS	8.8	8.8	9.0	8.9	9.4
Oxygen Saturation ²	%	94	93	92	NS	NS	87	87	88	88	93
pH	units	8.15	8.28	8.16	NS	NS	7.85	7.92	7.97	7.65	7.66
Total Solids	mg/L	1150	1160	1140	NS	NS	704	672	820	832	820
Total Suspended Solids	mg/L	358	338	312	NS	NS	116	107	158	156	148
Turbidity	n.t.u.	127	124	129	NS	NS	56.4	58.8	64.5	71.0	69.0
Total Organic Carbon	mg/L	14	14	14	NS	NS	14	13	16	14	13
Chlorophyll a	ug/L	9	4	9	NS	NS	14	11	23	5	7
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	NS	NS	0.017	0.071	<0.003	0.043	0.046
Nitrate Nitrogen	mg/L N	0.184	0.180	0.196	NS	NS	0.252	0.261	0.239	0.283	0.301
Total Kjeldahl Nitrogen	mg/L N	3.0	<2.0	3.0	NS	NS	2.0	3.0	<2.0	<2.0	2.0
Total Nitrogen ²	mg/L N	3.2	<2.0	3.2	NS	NS	2.3	3.3	<2.0	<2.0	2.3
Soluble Phosphorus	mg/L P	0.19	0.14	0.15	NS	NS	0.15	0.14	0.14	0.16	0.16
Total Phosphorus	mg/L P	0.60	0.60	0.60	NS	NS	0.40	0.40	0.40	0.40	0.40
Escherichia Coliform ³	colonies/100 mL	43	43	430	NS	NS	23	93	75	230	43
Fecal Coliform ³	colonies/100 mL	43	43	430	NS	NS	23	93	210	230	43

Weather Conditions during monitoring: Winds WNW at 21 km/hr with 14% cloud cover. Average air temperature during survey at 10.8°C

- Notes:
- 1) LIMS Reference No: 27634
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 740.1 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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