

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : June 9, 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	18.5	19.1	18.8	NS	NS	19.5	19.4	19.2	19.1	19.0
Dissolved Oxygen	mg/L	8.0	8.1	7.3	NS	NS	7.9	7.4	7.2	7.0	7.5
Oxygen Saturation ²	%	86	88	79	NS	NS	87	81	79	76	81
pH	units	8.13	8.16	8.03	NS	NS	7.86	7.87	7.87	7.82	7.78
Total Solids	mg/L	672	700	560	NS	NS	508	440	536	508	508
Total Suspended Solids	mg/L	140	165	80	NS	NS	42	56	111	58	70
Turbidity	n.t.u.	93	104	60	NS	NS	39	43	47	48	53
Total Organic Carbon	mg/L	13	13	14	NS	NS	17	17	15	15	17
Chlorophyll a	ug/L	19	21	16	NS	NS	7	11	11	9	12
Ammonia Nitrogen	mg/L N	0.033	<0.003	0.053	NS	NS	0.047	0.030	0.047	0.070	0.389
Nitrate Nitrogen	mg/L N	0.875	0.945	0.818	NS	NS	0.551	0.593	0.626	0.620	0.686
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	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.29	0.27	0.33	NS	NS	0.22	0.22	0.23	0.23	0.24
Total Phosphorus	mg/L P	0.50	0.50	0.50	NS	NS	0.30	0.30	0.30	0.30	0.40
Escherichia Coliform ³	colonies/100 mL	930	1200	1600	NS	NS	640	380	11000	1200	2100
Fecal Coliform ³	colonies/100 mL	930	1200	1600	NS	NS	640	380	11000	2100	>11000

Weather Conditions during monitoring: Winds NW at 31 km/hr with 100% cloud cover and light precipitation. Average air temperature during survey at 10.3°C

- Notes:
- 1) LIMS Reference No: 26381
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 738.3 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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Supervisor of Analytical Services

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