

**City of Winnipeg
Water and Waste Department**

2011 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : June 22, 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	19.6	NS	19.3	19.3	NS	19.9	19.9	19.6	19.5	19.8
Dissolved Oxygen	mg/L	7.7	NS	7.9	8.1	NS	7.5	7.4	7.7	7.8	8.0
Oxygen Saturation ²	%	85	NS	86	89	NS	83	82	85	86	88
pH	units	8.11	NS	8.11	8.18	NS	8.13	8.16	8.15	8.13	8.04
Total Solids	mg/L	824	NS	820	816	NS	920	892	860	1020	992
Total Suspended Solids	mg/L	160	NS	166	178	NS	236	214	198	200	204
Turbidity	n.t.u.	97.9	NS	102	117	NS	112	110	123	114	122
Total Organic Carbon	mg/L	16	NS	16	16	NS	13	13	15	14	15
Chlorophyll a	ug/L	4	NS	7	7	NS	11	7	4	2	4
Ammonia Nitrogen	mg/L N	0.056	NS	0.056	0.075	NS	0.072	0.051	0.046	0.111	0.136
Nitrate Nitrogen	mg/L N	0.336	NS	0.337	0.353	NS	0.817	0.846	0.594	0.607	0.651
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	0.19	NS	0.18	0.21	NS	0.17	0.16	0.17	0.18	0.18
Total Phosphorus	mg/L P	<0.30	NS	0.40	0.40	NS	0.40	0.40	0.40	0.40	0.50
Escherichia Coliform ³	colonies/100 mL	43	NS	150	430	NS	93	930	930	9300	93
Fecal Coliform ³	colonies/100 mL	43	NS	150	430	NS	93	1500	930	9300	230

Weather Conditions during monitoring: Winds NE at 14 km/hr with 100% cloud cover and 12.5 mm of precipitation. Average air temperature during survey at 15.4°C.

- Notes:
- 1) LIMS Reference No: 29843
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 741.6 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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