

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : August 17, 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	19.2	19.1	19.7	NS	NS	20.2	20.1	19.3	19.1	19.5
Dissolved Oxygen	mg/L	8.2	8.2	8.3	NS	NS	7.5	7.4	7.7	7.8	8.4
Oxygen Saturation ²	%	89	89	91	NS	NS	83	82	84	85	92
pH	units	8.30	8.31	8.19	NS	NS	8.14	7.88	8.19	8.14	8.01
Total Solids	mg/L	868	872	848	NS	NS	556	492	636	680	672
Total Suspended Solids	mg/L	180	171	192	NS	NS	120	80	128	108	134
Turbidity	n.t.u.	104	91.4	101	NS	NS	85.8	74.5	80.9	81.4	92.9
Total Organic Carbon	mg/L	19	19	19	NS	NS	15	15	17	17	17
Chlorophyll a	ug/L	18	19	21	NS	NS	12	11	12	14	12
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	NS	NS	0.020	0.019	<0.003	0.029	0.036
Nitrate Nitrogen	mg/L N	0.358	0.358	0.399	NS	NS	0.331	0.383	0.389	0.459	0.508
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	0.23	0.23	0.24	NS	NS	0.21	0.22	0.23	0.24	0.25
Total Phosphorus	mg/L P	0.60	0.30	0.60	NS	NS	0.50	0.50	0.60	0.60	0.60
Escherichia Coliform ³	colonies/100 mL	150	9	230	NS	NS	43	1500	750	930	1500
Fecal Coliform ³	colonies/100 mL	150	9	230	NS	NS	43	1500	750	930	1500

Weather Conditions during monitoring: Winds SW at 8 km/hr changing to ENE at 8 km/hr with 100% cloud cover and 0.1 mm of precipitation. Average air temperature during survey at 12°C

- Notes:
- 1) LIMS Reference No: 27066
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates 734.5 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction

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