

**City of Winnipeg
Water and Waste Department**

2011 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 6, 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	24.0	NS	24.1	23.7	NS	23.1	23.0	23.1	23.0	22.9
Dissolved Oxygen	mg/L	7.1	NS	7.3	7.1	NS	7.2	6.9	6.9	7.5	7.4
Oxygen Saturation ²	%	85	NS	88	85	NS	85	81	81	88	87
pH	units	8.04	NS	8.09	8.07	NS	7.93	7.94	8.01	8.11	8.02
Total Solids	mg/L	792	NS	768	800	NS	728	716	736	756	736
Total Suspended Solids	mg/L	146	NS	136	134	NS	144	152	156	156	143
Turbidity	n.t.u.	103	NS	88.6	95.2	NS	81.5	96.4	104	100	94.2
Total Organic Carbon	mg/L	25	NS	26	21	NS	17	19	19	25	22
Chlorophyll a	ug/L	11	NS	11	9	NS	5	7	4	9	11
Ammonia Nitrogen	mg/L N	0.050	NS	0.033	0.029	NS	0.053	0.047	0.025	0.071	0.045
Nitrate Nitrogen	mg/L N	0.227	NS	0.227	0.239	NS	3.170	3.300	2.190	2.250	2.300
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	4.2	4.3	3.2	3.3	3.3
Soluble Phosphorus	mg/L P	0.27	NS	0.24	0.24	NS	0.24	0.22	0.23	0.26	0.23
Total Phosphorus	mg/L P	0.40	NS	0.50	0.50	NS	0.40	0.40	0.50	0.50	0.50
Escherichia Coliform ³	colonies/100 mL	23	NS	43	43	NS	93	230	43	43	160
Fecal Coliform ³	colonies/100 mL	23	NS	43	43	NS	93	230	93	93	160

Weather Conditions during monitoring: Winds W at 9 km/hr with 16% cloud cover. Average air temperature during survey at 26.3°C.

- Notes:
- 1) LIMS Reference No: 30057
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 745.1 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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