

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : September 29, 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	15.8	15.6	15.8	NS	NS	15.1	14.9	14.7	14.8	14.7
Dissolved Oxygen	mg/L	9.3	9.3	9.2	NS	NS	8.6	8.4	8.6	8.7	9.4
Oxygen Saturation ²	%	94	94	93	NS	NS	86	84	85	86	93
pH	units	8.32	8.33	8.34	NS	NS	7.93	7.91	8.03	7.95	7.89
Total Solids	mg/L	1000	1270	1210	NS	NS	764	764	900	896	868
Total Suspended Solids	mg/L	342	384	308	NS	NS	308	272	324	336	296
Turbidity	n.t.u.	173	187	156	NS	NS	171	177	165	210	195
Total Organic Carbon	mg/L	16	16	16	NS	NS	14	14	14	14	14
Chlorophyll a	ug/L	12	12	7	NS	NS	5	5	5	1	<1
Ammonia Nitrogen	mg/L N	0.009	<0.003	<0.003	NS	NS	0.011	0.023	0.015	0.025	0.035
Nitrate Nitrogen	mg/L N	0.330	0.361	0.340	NS	NS	0.712	0.703	0.637	0.631	0.633
Total Kjeldahl Nitrogen	mg/L N	3.0	3.0	3.0	NS	NS	2.0	3.0	3.0	4.0	3.0
Total Nitrogen ²	mg/L N	3.3	3.4	3.3	NS	NS	2.7	3.7	3.6	4.6	3.6
Soluble Phosphorus	mg/L P	0.20	0.19	0.20	NS	NS	0.30	0.30	0.29	0.30	0.32
Total Phosphorus	mg/L P	0.70	0.30	0.60	NS	NS	0.70	0.70	0.70	0.80	0.80
Escherichia Coliform ³	colonies/100 mL	230	93	430	NS	NS	230	75	2300	75	150
Fecal Coliform ³	colonies/100 mL	230	93	430	NS	NS	230	75	2300	75	430

Weather Conditions during monitoring: Winds NW at 36 km/hr with 5% cloud cover. Average air temperature during survey at 17°C

- Notes:
- 1) LIMS Reference No: 27513
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 739.6 ft
 - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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