

**City of Winnipeg
Water and Waste Department**

2009 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : November 6, 2009		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	3.5	3.6	2.9	NS	NS	5.1	5.3	4.8	5.3	5.0
Dissolved Oxygen	mg/L	13.4	13.4	13.5	NS	NS	12.1	12.2	12.7	12.7	12.6
Oxygen Saturation ²	%	101	101	100	NS	NS	95	96	99	100	99
pH	units	8.64	8.66	8.68	NS	NS	8.33	8.33	8.36	8.38	8.30
Total Solids	mg/L	716	756	736	NS	NS	1020	992	904	944	884
Total Suspended Solids	mg/L	85	93	78	NS	NS	284	262	222	196	178
Turbidity	n.t.u.	50	52	47	NS	NS	164	184	146	132	127
Total Organic Carbon	mg/L	15	13	12	NS	NS	11	11	11	10	11
Chlorophyll a	ug/L	59	52	56	NS	NS	9	9	12	16	18
Ammonia Nitrogen	mg/L N	0.025	<0.003	0.008	NS	NS	0.094	0.172	0.134	0.240	0.386
Nitrate Nitrogen	mg/L N	0.042	0.023	0.027	NS	NS	0.860	0.852	0.668	0.654	0.713
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	0.08	0.07	0.07	NS	NS	0.18	0.18	0.16	0.18	0.21
Total Phosphorus	mg/L P	<0.30	<0.30	<0.30	NS	NS	0.40	0.50	0.40	0.40	0.40
Escherichia Coliform ³	colonies/100 mL	70	17	79	NS	NS	8	13	22	490	27
Fecal Coliform ³	colonies/100 mL	70	33	170	NS	NS	13	23	70	790	460

Weather Conditions during monitoring: Winds S at 30 km/hr with 1% cloud cover. Average air temperature during survey at 5.2 C

- Notes:
- 1) LIMS Reference No: 24558
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 731.1 ft
 - 5) There is no sample at the West Perimeter Bridge and the South Floodway Control Gates due to construction.

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