

**City of Winnipeg
Water and Waste Department**

2010 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : April 28, 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	15.7	15.5	14.4	15.5	NS	15.5	14.7	14.7	14.5	14.6
Dissolved Oxygen	mg/L	9.4	9.0	9.6	9.5	NS	8.0	8.1	8.4	8.4	9.6
Oxygen Saturation ²	%	95	91	94	96	NS	81	80	83	83	95
pH	units	8.50	8.41	8.57	8.44	NS	8.03	8.08	8.01	8.07	8.01
Total Solids	mg/L	916	904	804	972	NS	724	736	680	728	656
Total Suspended Solids	mg/L	222	312	117	292	NS	116	112	116	108	204
Turbidity	n.t.u.	94	111	62	108	NS	73	64	66	68	69
Total Organic Carbon	mg/L	11	10	11	10	NS	10	10	10	11	11
Chlorophyll a	ug/L	63	49	63	52	NS	12	7	NR	NR	NR
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	NS	0.051	0.089	0.087	0.084	0.156
Nitrate Nitrogen	mg/L N	0.237	0.330	0.212	0.268	NS	0.372	0.367	0.346	0.360	0.404
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.12	0.12	0.11	0.12	NS	0.13	0.13	0.13	0.13	0.14
Total Phosphorus	mg/L P	0.50	0.50	0.40	0.30	NS	0.30	0.30	0.30	0.40	0.40
Escherichia Coliform ³	colonies/100 mL	33	17	110	11	NS	14	49	79	31	33
Fecal Coliform ³	colonies/100 mL	33	17	220	11	NS	14	49	130	31	33

Weather Conditions during monitoring: Winds SSE at 35 km/hr with 83% cloud cover. Average air temperature during survey at 17°C

- Notes:
- 1) LIMS Reference No: 25980
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 736.7 ft
 - 5) There is no sample at the South Floodway Control Gates due to construction.
 - 6) There are no chlorophyll results for the Redwood Bridge, the North Perimeter Bridge and the Lockport Bridge due to a technician error.

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Approved in LIMS By: S. Fletcher
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