

**City of Winnipeg
Water and Waste Department**

2012 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 4, 2012		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	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	12.8	12.9	12.6	12.6	NS	12.3	12.4	12.5	13.0	13.3	13.1
Dissolved Oxygen	mg/L	10.3	10.4	10.3	10.0	NS	11.2	11.3	10.7	10.5	11.1	11.7
Oxygen Saturation ²	%	98	99	97	94	NS	105	106	101	100	106	112
pH	units	8.58	8.59	8.55	8.56	NS	8.69	8.59	8.57	8.56	8.53	8.48
Total Solids	mg/L	1110	1040	1040	1020	NS	920	866	796	832	806	792
Total Suspended Solids	mg/L	270	228	230	202	NS	23	15	14	29	31	33
Turbidity	n.t.u.	153	138	141	120	NS	19	14	16	23	21	24
Total Organic Carbon	mg/L	14	14	14	14	NS	12	13	12	14	12	13
Chlorophyll a	ug/L	47	42	44	39	NS	20	25	16	35	62	60
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.005	0.016	NS	<0.003	0.631	0.656	0.316	0.934	0.608
Nitrate Nitrogen	mg/L N	0.290	0.307	0.315	0.338	NS	0.003	0.099	0.196	0.293	0.321	0.520
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	NS	<2.0	3.0	<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	3.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.13	0.11	0.13	0.12	NS	0.12	0.21	0.18	0.15	0.24	0.23
Total Phosphorus	mg/L P	0.40	<0.30	0.40	0.30	NS	<0.30	0.30	<0.30	<0.30	<0.30	<0.30
Escherichia Coliform ³	colonies/100 mL	230	930	430	2100	NS	43	93	43	930	230	430
Fecal Coliform ³	colonies/100 mL	230	2300	430	2100	NS	230	230	93	2300	230	430

Weather Conditions during monitoring: Winds North at 20 km/hr with 100% cloud cover. Average air temperature during survey at 8.0°C.

- Notes:
- 1) LIMS Reference No: 34038
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates 738.4 ft.
 - 5] There was no sample for the South Floodway Control location due to construction.

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