

**City of Winnipeg
Water and Waste Department**

2013 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : June 12, 2013		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	20.1	20.5	20.5	20.0	20.1	19.6	19.7	18.8	19.2	19.0	19.4
Dissolved Oxygen	mg/L	8.2	8.2	8.2	8.2	7.6	7.9	7.5	7.4	7.5	7.6	7.9
Oxygen Saturation ²	%	91	91	91	91	85	87	83	80	82	83	87
pH	units	8.35	8.32	8.30	8.30	8.12	8.09	8.06	7.99	7.98	7.95	7.93
Total Solids	mg/L	940	1010	906	980	630	622	636	644	666	672	672
Total Suspended Solids	mg/L	248	356	142	280	170	100	86	104	116	128	134
Turbidity	n.t.u.	118	120	108	126	65	68	63	71	80	82	85
Total Organic Carbon	mg/L	15	15	15	15	17	15	16	15	14	15	16
Chlorophyll a	ug/L	2	9	2	<1	5	4	<1	4	9	7	<1
Ammonia Nitrogen	mg/L N	0.007	<0.003	0.027	0.039	0.015	<0.003	0.018	0.030	0.035	0.073	0.042
Nitrate Nitrogen	mg/L N	0.333	0.337	0.348	0.359	0.612	0.664	0.685	0.721	0.673	0.681	0.723
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.11	0.11	0.11	0.11	0.16	0.17	0.16	0.17	0.17	0.18	0.21
Total Phosphorus	mg/L P	0.30	0.30	0.30	0.40	0.30	0.30	<0.30	<0.30	0.30	0.30	0.30
Escherichia Coliform ³	MPN/100 mL	930	43	430	430	9	4	9	43	93	43	93
Fecal Coliform ³	MPN/100 mL	930	43	930	430	15	9	9	43	150	43	93

Weather Conditions during monitoring: Winds N at 20 km/hr with 75 % cloud cover and 0 mm of precipitation. Average air temperature during survey at 21 C

- Notes:
- 1) LIMS Reference No: 36188
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates 741.3
 - 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.

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