

**City of Winnipeg
Water and Waste Department**

2013 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : September 4, 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	21.2	21.2	21.2	20.3	21.2	22.2	23.1	18.8	20.8	21.2	21.7
Dissolved Oxygen	mg/L	9.2	9.3	9.3	8.9	8.6	9.1	9.6	8.4	8.7	8.7	8.8
Oxygen Saturation ²	%	104	105	105	99	97	105	113	90	98	99	101
pH	units	8.66	8.67	8.15	8.62	8.13	8.61	8.56	8.10	8.46	8.38	8.23
Total Solids	mg/L	802	836	816	816	714	652	658	640	708	732	740
Total Suspended Solids	mg/L	87	107	83	89	17	18	17	38	34	34	37
Turbidity	n.t.u.	51	52	50	49	22	16	14	33	26	27	24
Total Organic Carbon	mg/L	17	21	17	17	17	24	18	22	16	50	16
Chlorophyll a	ug/L	<1	39	33	26	<1	2	5	<1	<1	21	2
Ammonia Nitrogen	mg/L N	<0.003	0.040	0.026	<0.003	<0.003	<0.003	0.257	0.057	0.052	0.075	0.129
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.030	0.221	0.184	0.240	0.351	0.204	0.212	0.317
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	0.13	0.15	0.14	0.14	0.20	0.18	0.21	0.19	0.21	0.19	0.34
Total Phosphorus	mg/L P	0.40	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.70
Escherichia Coliform ³	MPN/100 mL	2100	23	23	150	<3	4	43	23	430	75	23
Fecal Coliform ³	MPN/100 mL	2100	23	23	150	<3	4	43	23	930	430	23

Weather Conditions during monitoring: Winds ENE at 5 km/hr with 10 % cloud cover and 0 mm of precipitation. Average air temperature during survey at 16°C

- Notes:
- 1) LIMS Reference No: 36976
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates 734.0 ft
 - 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.

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