

**City of Winnipeg
Water and Waste Department**

2013 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 24, 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	22.5	22.5	22.2	21.9	23.4	23.7	23.9	23.3	22.1	21.6	22.1
Dissolved Oxygen	mg/L	7.6	7.6	7.7	7.8	7.1	6.8	7.0	6.5	7.2	7.2	7.8
Oxygen Saturation ²	%	89	89	89	89	84	82	84	76	83	83	90
pH	units	8.27	8.28	8.29	8.25	8.12	8.12	8.08	8.02	8.09	8.03	7.84
Total Solids	mg/L	866	864	916	1000	1130	872	760	868	972	912	958
Total Suspended Solids	mg/L	212	254	218	284	500	226	138	254	302	204	226
Turbidity	n.t.u.	128	142	143	150	306	139	100	165	185	139	140
Total Organic Carbon	mg/L	17	17	16	16	12	12	12	12	14	15	15
Chlorophyll a	ug/L	9	5	7	5	<1	<1	2	2	4	4	5
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	0.018	0.040	0.052	0.040	0.119	0.120
Nitrate Nitrogen	mg/L N	0.291	0.262	0.278	0.321	0.888	1.030	0.882	0.803	0.672	0.609	0.551
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	0.23	0.23	0.23	0.24	0.26	0.27	0.25	0.26	0.26	0.26	0.40
Total Phosphorus	mg/L P	0.70	0.50	0.60	0.70	0.80	0.60	0.50	0.60	0.70	0.60	0.60
Escherichia Coliform ³	MPN/100 mL	15	23	23	230	43	43	93	230	930	93	230
Fecal Coliform ³	MPN/100 mL	43	23	23	230	43	43	93	230	930	430	750

Weather Conditions during monitoring: Winds SW at 14 km/hr with 50 % cloud cover and 5 mm of precipitation. Average air temperature during survey at 17 C

- Notes:
- 1) LIMS Reference No: 36601
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates 741.9

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