

**City of Winnipeg
Water and Waste Department**

2014 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : August 27, 2014		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE (R1)	WEST PERIMETER BRIDGE (R2)	ASSINIBOINE PARK FOOT BRIDGE (R3)	MAIN STREET BRIDGE (R4)	SOUTH FLOODWAY CONTROL ⁴ (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	19.3	19.2	19.2	18.9	21.0	21.0	21.0	20.3	18.9	18.8	19.0
Dissolved Oxygen	mg/L	8.4	8.4	8.4	8.6	8.0	7.9	7.9	7.9	8.2	8.3	9.0
Oxygen Saturation ²	%	91	91	91	92	90	88	88	87	88	88	97
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
pH	units	8.29	8.29	8.29	8.30	8.31	8.34	8.32	8.30	8.27	8.26	8.12
Total Solids	mg/L	1170	1250	1110	1300	902	892	798	808	1090	1150	1140
Total Suspended Solids	mg/L	242	216	214	220	148	99	77	196	182	137	179
Turbidity	n.t.u.	131	127	97	128	109	88	80	65	110	106	107
Total Organic Carbon	mg/L	27	27	28	23	20	18	19	17	22	21	23
Chlorophyll a	ug/L	4	7	21	4	<1	7	4	4	4	5	4
Ammonia Nitrogen	mg/L N	0.082	0.085	0.087	0.019	0.077	0.125	0.111	0.154	0.072	0.135	0.121
Nitrate Nitrogen	mg/L N	0.389	0.386	0.388	0.386	0.324	0.330	0.435	0.440	0.406	0.436	0.484
Total Kjeldahl Nitrogen	mg/L N	1.6	1.3	1.5	1.6	0.9	1.1	1.0	1.2	0.7	1.0	1.6
Total Nitrogen ²	mg/L N	2.0	1.7	1.9	2.0	1.2	1.4	1.4	1.6	1.1	1.4	2.1
Soluble Phosphorus	mg/L P	0.19	0.20	0.21	0.19	0.15	0.16	0.18	0.19	0.20	0.21	0.38
Total Phosphorus	mg/L P	0.50	0.60	0.60	0.50	0.40	0.40	0.40	0.40	0.50	0.50	0.50
Escherichia Coliform ³	MPN/100 mL	750	230	930	93	43	9	42	430	430	93	230
Fecal Coliform ³	MPN/100 mL	750	430	930	93	75	15	360	430	430	150	230

Weather Conditions during monitoring Winds SW at 20 km/hr with <1% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 24°C

Notes: 1) LIMS Reference No: **40244**
 2) Calculated values
 3) Analysed by contract laboratory
 4) Red River Floodway at South Floodway Control Gates **735.3** ft.

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