

**City of Winnipeg  
Water and Waste Department**

**2014 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : November 5, 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 <sup>4</sup> (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	4.1	4.3	4.4	3.9	4.9	5.1	4.8	4.8	4.3	4.3	4.8
Dissolved Oxygen	mg/L	11.9	11.8	11.6	11.9	11.7	11.9	11.8	11.6	11.7	11.7	12.1
Oxygen Saturation <sup>2</sup>	%	91	91	91	90	92	94	92	91	91	90	95
Biochemical Oxygen Demand	mg/L	<3	<3	3	<3	<3	<3	<3	<3	3	3	4
pH	units	8.60	8.59	8.59	8.52	8.62	8.72	8.65	8.65	8.60	8.56	8.23
Total Solids	mg/L	1050	1140	1010	1270	698	1020	726	818	1390	864	924
Total Suspended Solids	mg/L	123	129	128	122	50	56	43	44	90	65	66
Turbidity	n.t.u.	67	64	61	128	38	67	37	32	48	92	55
Total Organic Carbon	mg/L	20	54	20	17	20	17	18	17	23	18	20
Chlorophyll a	ug/L	7	9	5	2	16	<1	2	7	19	2	11
Ammonia Nitrogen	mg/L N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.160
Nitrate Nitrogen	mg/L N	0.295	0.299	0.293	0.290	0.086	0.102	0.122	0.112	0.216	0.213	0.263
Total Kjeldahl Nitrogen	mg/L N	0.6	1.6	2.0	0.7	<0.5	0.7	0.7	0.6	1.4	0.8	0.9
Total Nitrogen <sup>2</sup>	mg/L N	0.9	1.9	2.3	1.0	0.3	0.8	0.8	0.7	1.6	1.0	1.2
Soluble Phosphorus	mg/L P	0.11	0.11	0.11	0.11	0.09	0.10	0.11	0.11	0.11	0.10	0.40
Total Phosphorus	mg/L P	0.50	0.40	0.40	0.40	0.50	0.30	0.40	0.40	0.40	0.50	0.60
Escherichia Coliform <sup>3</sup>	MPN/100 mL	7	23	<3	9	23	43	9	23	43	93	93
Fecal Coliform <sup>3</sup>	MPN/100 mL	7	43	4	9	23	43	9	23	43	230	230

Weather Conditions during monitoring Winds NNE at 10 km/hr with 50% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 2°C

Notes: 1) LIMS Reference No: **40939**  
 2) Calculated values  
 3) Analysed by contract laboratory  
 4) Red River Floodway at South Floodway Control Gates **731.2** ft.

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