

**City of Winnipeg
Water and Waste Department**

2017 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : August 10, 2017		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 ³ (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Temperature	° C	21.4	21.9	21.0	21.4	24.2	23.2	23.8	22.9	21.8	21.8	22.3
Dissolved Oxygen	mg/L	9.0	9.4	9.0	7.4	8.7	9.0	9.1	8.7	7.8	7.3	8.5
Oxygen Saturation	%	102	107	101	83	103	105	107	101	88	83	98
Biochemical Oxygen Demand	mg/L	4	nr ⁴	nr ⁴	nr ⁴	<3	<3	<3	<3	nr ⁴	nr ⁴	4
pH	units	8.45	8.48	8.39	8.40	8.45	8.48	8.44	8.41	8.24	8.10	8.25
Total Solids	mg/L	886	848	860	918	908	958	948	974	944	924	926
Total Suspended Solids	mg/L	98	95	91	101	15	18	31	28	38	38	39
Turbidity	n.t.u.	41	51	57	39	14	13	14	15	23	18	19
Total Organic Carbon	mg/L	11	11	12	10	13	13	13	13	13	12	11
Chlorophyll a	ug/L	52	48	52	36	9	14	19	23	27	29	57
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.549	0.525	0.055	0.750	0.196
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.382	0.359	0.354	0.368	0.244	0.251	0.328
Total Nitrogen	mg/L N	0.7	0.7	1.0	0.8	1.5	1.6	2.5	1.8	1.6	2.6	2.0
Soluble Phosphorus	mg/L P	0.02	0.02	0.02	0.02	0.11	0.11	0.17	0.11	0.08	0.17	0.08
Total Phosphorus	mg/L P	0.17	0.16	0.16	0.16	0.14	0.15	0.23	0.18	0.17	0.26	0.20
Escherichia Coliform ²	MPN/100 mL	32	36	46	649	8	78	93	921	2420	461	33
Fecal Coliform ²	MPN/100 mL	28	40	49	980	9	102	107	1550	2420	411	55

Weather Conditions during monitoring Winds North at 5 km/hr with 10% cloud cover and <0.1 mm of precipitation. Average air temperature during survey at 24°C

- Notes:
- 1) LIMS Reference No: **50413**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **734.5** ft.
 - 4) No result because the initial DO and/or temperature were outside the BOD test limits.

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