

**City of Winnipeg
Water and Waste Department**

2017 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : August 24, 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	17.7	17.9	17.4	17.8	20.1	20.5	20.9	20.3	19.8	19.5	20.4
Dissolved Oxygen	mg/L	9.9	10.7	9.8	8.7	8.7	9.1	8.5	7.7	7.4	7.0	8.2
Oxygen Saturation	%	104	112	102	92	96	101	95	85	81	76	91
Biochemical Oxygen Demand	mg/L	nr ⁴	nr ⁴	nr ⁴	nr ⁴	<3	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴
pH	units	8.32	8.37	8.30	8.26	8.35	8.35	8.21	8.11	8.07	7.83	7.99
Total Solids	mg/L	818	818	816	818	866	856	832	776	784	786	834
Total Suspended Solids	mg/L	80	80	74	48	32	20	26	43	40	40	40
Turbidity	n.t.u.	54	56	55	45	35	22	22	39	39	37	38
Total Organic Carbon	mg/L	10	10	10	11	12	12	13	12	12	12	12
Chlorophyll a	ug/L	45	49	41	36	11	15	9	11	20	19	17
Ammonia Nitrogen	mg/L N	0.015	<0.003	<0.003	<0.003	<0.003	<0.003	0.468	0.441	0.279	1.350	0.654
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.363	0.382	0.421	0.546	0.389	0.398	0.505
Total Nitrogen	mg/L N	0.7	0.7	0.8	1.1	1.2	1.3	1.9	1.9	1.5	2.7	2.2
Soluble Phosphorus	mg/L P	0.05	0.09	0.08	0.09	0.16	0.22	0.19	0.21	0.16	0.30	0.22
Total Phosphorus	mg/L P	0.16	0.18	0.17	0.15	0.18	nr ⁵	0.23	0.24	0.21	0.40	0.31
Escherichia Coliform ²	MPN/100 mL	59	58	154	1410	23	20	30	37	265	78	42
Fecal Coliform ²	MPN/100 mL	86	101	276	>2420	40	26	28	32	326	120	57

Weather Conditions during monitoring Winds East at 7 km/hr with 5% cloud cover and 2.7 mm of precipitation. Average air temperature during survey at 19°C

- Notes:
- 1) LIMS Reference No: **50545**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **734.7** ft.
 - 4) No result because the initial temperature was outside the BOD test limit.
 - 5) No result due to technician error.

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