

**City of Winnipeg
Water and Waste Department**

2017 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : July 13, 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	20.9	20.8	20.1	20.3	24.1	23.5	23.6	23.1	22.3	22.5	21.9
Dissolved Oxygen	mg/L	8.4	8.5	8.3	8.1	7.7	7.7	7.7	7.7	7.8	7.7	8.5
Oxygen Saturation	%	94	95	91	90	92	91	91	90	90	88	96
Biochemical Oxygen Demand	mg/L	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴	<3	nr ⁴	nr ⁴	nr ⁴	nr ⁴	nr ⁴
pH	units	8.22	8.32	8.25	8.31	8.25	8.24	8.20	8.19	8.25	8.16	8.11
Total Solids	mg/L	884	912	876	840	956	850	826	818	780	770	730
Total Suspended Solids	mg/L	125	142	125	66	148	51	26	30	30	19	31
Turbidity	n.t.u.	84	90	88	54	114	46	36	43	30	23	29
Total Organic Carbon	mg/L	12	16	15	17	18	20	20	20	20	20	18
Chlorophyll a	ug/L	37	40	41	40	9	8	11	9	19	15	19
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.005	<0.003	<0.003	0.037	0.066	0.061	0.185	0.209
Nitrate Nitrogen	mg/L N	0.143	0.050	0.040	<0.003	0.817	0.802	0.734	0.665	0.504	0.522	0.568
Total Nitrogen	mg/L N	0.4	0.7	0.5	0.6	1.3	1.3	1.3	1.4	1.1	1.2	1.3
Soluble Phosphorus	mg/L P	0.05	0.04	0.04	0.04	0.11	0.11	0.12	0.12	0.10	0.11	0.12
Total Phosphorus	mg/L P	0.26	0.24	0.25	0.24	0.32	0.21	0.20	0.21	0.20	0.20	0.22
Escherichia Coliform ²	MPN/100 mL	14	21	105	525	22	9	51	172	328	816	>2420
Fecal Coliform ²	MPN/100 mL	16	22	225	437	33	9	43	185	649	613	>2420

Weather Conditions during monitoring Winds North at 5 km/hr with 30% cloud cover and 9.9 mm of precipitation. Average air temperature during survey at 18.5°C

- Notes:
- 1) LIMS Reference No: **50125**
 - 2) Analysed by contract laboratory
 - 3) Red River Floodway at South Floodway Control Gates **735.5** ft.
 - 4) No result because the initial DO and/or temperature were outside the BOD test limits.

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