

**City of Winnipeg  
Water and Waste Department**

**2017 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : September 21, 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 <sup>3</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	14.6	14.4	14.2	14.8	16.0	15.6	15.5	15.2	15.2	15.3	15.2
Dissolved Oxygen	mg/L	9.4	9.6	9.4	9.3	9.4	9.6	9.3	9.0	9.0	8.9	9.5
Oxygen Saturation	%	92	93	92	92	95	98	93	90	89	89	94
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	4	4
pH	units	8.25	8.25	8.28	8.34	8.44	8.46	8.30	8.33	8.30	8.21	8.02
Total Solids	mg/L	766	760	760	782	808	880	824	822	856	838	800
Total Suspended Solids	mg/L	76	83	50	29	37	35	37	26	26	31	26
Turbidity	n.t.u.	52	57	38	24	40	36	37	28	23	24	21
Total Organic Carbon	mg/L	18	20	20	20	21	19	22	24	21	18	18
Chlorophyll a	ug/L	46	43	38	28	14	14	13	15	17	21	18
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	0.017	0.361	0.379	0.226	0.758	0.627
Nitrate Nitrogen	mg/L N	0.252	0.172	0.166	0.090	0.030	0.020	0.030	0.060	0.125	0.129	0.447
Total Nitrogen	mg/L N	1.0	0.9	1.0	0.8	1.0	0.9	1.3	1.6	1.3	1.8	2.0
Soluble Phosphorus	mg/L P	0.14	0.14	0.11	0.14	0.20	0.15	0.16	0.15	0.19	0.20	0.20
Total Phosphorus	mg/L P	0.23	0.24	0.24	0.18	nr <sup>4</sup>	0.13	0.22	0.20	0.20	0.26	0.25
Escherichia Coliform <sup>2</sup>	MPN/100 mL	1550	>2420	1410	>2420	687	210	101	40	435	326	75
Fecal Coliform <sup>2</sup>	MPN/100 mL	>2420	2420	2420	2420	517	261	210	86	461	461	86

Weather Conditions during monitoring: Winds S/SE at 15 km/hr with 80% cloud cover and 3.5 mm of precipitation. Average air temperature during survey at 18°C

- Notes:
- 1) LIMS Reference No: **50795**
  - 2) Analysed by contract laboratory
  - 3) Red River Floodway at South Floodway Control Gates **734.4** ft.
  - 4) No result due to technician error.

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