



2019 RIVERS SURVEY MONITORING REPORT

Survey Date: September 19, 2019		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 (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Sample Number		242033	242035	242032	242034	242036	242042	242037	242040	242041	242039	242038
Temperature	° C	19.1	19.4	18.9	19.7	18.7	18.8	19.7	18.5	18.4	18.3	18.6
Dissolved Oxygen	mg/L	8.6	8.8	8.8	7.8	8.7	8.7	8.7	8.6	8.5	8.3	9.3
Oxygen Saturation	%	93	95	95	85	93	94	95	92	90	88	98
Biochemical Oxygen Demand	mg/L	>8	>8	6	7	>7	<4	<4	4	5	5	4
pH	units	8.65	8.68	8.68	8.70	8.33	8.33	8.32	8.31	8.35	8.26	8.20
Total Solids	mg/L	794	802	802	770	914	818	800	848	800	818	746
Total Suspended Solids	mg/L	111	114	113	63	143	122	94	104	42	49	9
Turbidity	n.t.u.	70	81	75	46	120	77	60	66	30	32	12
Total Organic Carbon	mg/L	12.4	12.2	12.8	12.6	13.5	14.1	13.5	13.0	12.6	13.4	12.4
Chlorophyll a	ug/L	85.4	78.1	85.4	62.1	12.5	11.3	10.0	8.7	13.4	10.7	2.7
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.007	0.010	<0.003	<0.003	0.064	0.107	0.075	0.298	0.235
Nitrate Nitrogen	mg/L N	<0.003	<0.003	0.003	0.003	0.205	0.195	0.177	0.197	0.200	0.301	0.385
Total Nitrogen	mg/L N	1.3	0.9	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.6	1.5
Soluble Phosphorus	mg/L P	0.14	0.13	0.16	0.13	0.16	0.15	0.18	0.17	0.15	0.19	0.20
Total Phosphorus	mg/L P	0.37	0.36	0.34	0.29	0.33	0.27	0.26	0.25	0.23	0.27	0.24
Escherichia Coliform	MPN/100 mL	200	330	260	200	340	280	130	220	100	110	200
Fecal Coliform	MPN/100 mL	300	370	560	230	340	370	230	290	190	260	140

Notes: NS - No Sample NA - Not Analyzed NR - No Result

Red River elevation at South Floodway control gates: 736.2 ft

Weather conditions during monitoring:

Wind Direction: NE
 Wind Speed: 4.5 km/h
 Cloud Coverage: 10%
 Precipitation: 0.3 mm
 Air Temperature: 22°C

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