



2019 RIVERS SURVEY MONITORING REPORT

Survey Date: May 16, 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		203833	203835	203832	203834	203836	203842	203837	203840	203841	203839	203838
Temperature	° C	12.7	12.9	12.3	13.3	12.6	12.7	12.5	12.1	12.1	11.0	11.7
Dissolved Oxygen	mg/L	10.3	10.5	10.4	9.7	8.8	8.6	8.9	8.6	8.7	8.7	9.1
Oxygen Saturation	%	97	100	97	93	84	81	84	80	81	83	85
Biochemical Oxygen Demand	mg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	units	8.56	8.59	8.57	8.56	7.97	7.93	7.92	7.91	7.97	7.90	7.91
Total Solids	mg/L	686	688	730	626	530	524	544	538	540	546	560
Total Suspended Solids	mg/L	107	101	102	42	67	72	73	82	83	85	111
Turbidity	n.t.u.	55	54	53	33	42	50	53	54	57	58	69
Total Organic Carbon	mg/L	11.9	11.5	11.7	11.9	13.9	13.7	14.0	13.4	13.9	13.6	13.8
Chlorophyll a	ug/L	30.0	27.4	29.4	36.7	8.7	10.0	8.0	8.0	8.7	9.3	9.3
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.004	0.091	0.016	0.028	0.048	0.051	0.047	0.084	0.119
Nitrate Nitrogen	mg/L N	0.115	0.122	0.135	0.084	0.138	0.138	0.140	0.141	0.136	0.139	0.153
Total Nitrogen	mg/L N	0.4	0.4	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.8
Soluble Phosphorus	mg/L P	0.11	0.10	0.11	0.09	0.20	0.17	0.20	0.18	0.17	0.16	0.17
Total Phosphorus	mg/L P	0.20	0.21	0.21	0.19	0.24	0.24	0.27	0.25	0.25	0.27	0.26
Escherichia Coliform	MPN/100 mL	30	<10	30	11,200	<10	<10	<10	<10	<10	10	1,050
Fecal Coliform	MPN/100 mL	<10	50	100	11,200	10	<10	10	30	30	10	930

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

Red River elevation at South Floodway control gates: 748.2 ft

Weather conditions during monitoring:

Wind Direction: N

Wind Speed: 14.1 km/h

Cloud Coverage: 25%

Precipitation: 12.7 mm

Air Temperature: 11°C

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