



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: July 22, 2021		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		409612	409619	409608	409617	409621	409627	409622	409625	409626	409624	409623
Temperature	° C	23.3	23.4	23.2	23.0	23.9	25.0	24.7	23.7	ns	23.0	23.0
Dissolved Oxygen	mg/L	8.4	8.4	8.0	7.2	6.8	7.6	6.7	5.4	ns	4.9	7.6
Oxygen Saturation	%	98	99	94	83	81	82	81	63	ns	58	89
Biochemical Oxygen Demand	mg/L	4	<4	<4	<4	nr	nr	6	nr	ns	<4	6
pH	units	8.51	8.45	8.37	8.20	8.21	8.25	8.02	7.93	ns	7.54	8.05
Total Solids	mg/L	1,080	1,020	858	1,040	832	938	752	980	ns	764	770
Total Suspended Solids	mg/L	76	68	41	25	5	20	27	21	ns	15	8
Turbidity	n.t.u.	39	42	29	19	12	13	20	11	ns	11	6
Total Organic Carbon	mg/L	12.4	12.6	13.6	13.4	13.7	13.6	13.5	13.4	ns	13.7	13.5
Chlorophyll a	ug/L	41.4	37.4	25.4	21.4	4.0	10.7	8.0	5.3	ns	8.0	6.7
Ammonia Nitrogen	mg/L N	0.008	0.050	0.038	0.089	0.112	0.098	0.975	0.728	ns	>2.00	1.89
Nitrate Nitrogen	mg/L N	<0.003	<0.003	0.021	0.047	0.823	0.770	0.591	0.396	ns	0.294	0.247
Total Nitrogen	mg/L N	0.9	1.0	1.1	1.2	2.1	2.0	3.1	2.5	ns	4.4	3.9
Soluble Phosphorus	mg/L P	nr	nr	nr	nr	nr	nr	nr	nr	ns	nr	nr
Total Phosphorus	mg/L P	0.19	0.19	0.22	0.22	0.27	0.25	0.31	0.30	ns	0.53	0.60
Escherichia Coliform	MPN/100 mL	<10	10	80	1,300	<10	<10	80	70	ns	290	<10
Fecal Coliform	MPN/100 mL	10	<10	120	2,760	10	40	620	620	ns	1,480	30

Notes: ns - no sample na - not analyzed nr - no result

Red River elevation at South Floodway control gates: 761 ft

Weather conditions during monitoring:

Wind Direction: East (E)

Wind Speed: 19 km/h

Cloud Coverage: 50%

Precipitation: 2.1 mm

Air Temperature: 21°C

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