



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: August 19, 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		417082	417085	417078	417084	417090	417097	417092	417095	417096	417094	417093
Temperature	° C	23.2	22.6	22.4	23.6	23.4	24.0	24.0	22.9	23.2	21.7	21.6
Dissolved Oxygen	mg/L	7.4	7.6	7.5	8.0	12.0	12.3	14.3	9.1	9.8	7.0	8.0
Oxygen Saturation	%	86	88	86	94	141	146	164	106	115	80	91
Biochemical Oxygen Demand	mg/L	<4	<4	<4	<4	<4	<4	8	8	5	4	10
pH	units	8.54	8.56	8.46	8.50	8.77	8.77	8.78	8.56	8.54	7.79	8.05
Total Solids	mg/L	832	882	820	818	842	760	730	724	746	702	684
Total Suspended Solids	mg/L	77	95	56	25	34	25	30	22	22	15	9
Turbidity	n.t.u.	46	65	40	20	18	13	19	15	15	9	7
Total Organic Carbon	mg/L	10.2	10.5	10.6	11.3	12.4	11.7	12.6	12.5	12.3	12.5	12.6
Chlorophyll a	ug/L	29.4	30.7	21.4	24.0	46.7	34.7	131	70.8	86.8	25.4	18.7
Ammonia Nitrogen	mg/L N	<0.01	0.09	0.03	0.03	0.10	0.07	0.83	0.66	0.14	3.63	3.65
Nitrate Nitrogen	mg/L N	<0.003	<0.003	0.035	0.011	0.007	0.011	0.342	0.496	0.232	0.582	0.695
Total Nitrogen	mg/L N	1.0	0.9	0.9	0.9	0.9	0.7	2.5	2.4	1.3	5.6	5.7
Soluble Phosphorus	mg/L P	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr
Total Phosphorus	mg/L P	0.22	0.22	0.23	0.18	0.15	0.10	0.39	0.33	0.23	0.65	0.69
Escherichia Coliform	MPN/100 mL	20	60	190	450	<10	10	<10	50	360	160	60
Fecal Coliform	MPN/100 mL	<10	90	170	430	10	10	10	150	380	330	30

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

Red River elevation at South Floodway control gates: 734.38 ft

Weather conditions during monitoring:

Wind Direction: North West (NW)

Wind Speed: 19 km/h

Cloud Coverage: 0%

Precipitation: <0.1 mm

Air Temperature: 15°C

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Date Compiled: 30-Mar-22