



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: September 16, 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		423920	423926	423916	423924	423929	423935	423930	423933	423934	423932	423931
Temperature	° C	15.1	14.9	14.5	15.9	16.6	16.5	16.5	16.9	16.8	17.6	17.1
Dissolved Oxygen	mg/L	8.7	8.8	8.5	7.9	9.6	9.3	8.7	7.4	6.9	6.6	8.3
Oxygen Saturation	%	86	88	83	80	99	95	89	76	71	69	86
Biochemical Oxygen Demand	mg/L	4	<4	<4	<4	<4	<4	<4	<4	<4	<4	5
pH	units	8.78	8.74	8.58	8.59	8.89	8.85	8.61	8.29	8.30	7.90	8.04
Total Solids	mg/L	712	720	714	686	852	888	844	784	648	802	780
Total Suspended Solids	mg/L	77	79	67	31	25	16	14	10	13	10	<3
Turbidity	n.t.u.	46	48	43	26	18	12	11	9	12	9	4
Total Organic Carbon	mg/L	11.9	11.4	10.9	10.8	12.8	11.4	12.3	12.0	11.9	12.2	12.1
Chlorophyll a	ug/L	28.0	25.4	21.4	18.7	6.7	8.0	10.7	8.0	8.0	6.7	2.7
Ammonia Nitrogen	mg/L N	0.026	0.025	0.052	0.032	0.067	0.077	0.972	0.795	0.552	>2.00	1.68
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.075	0.163	0.105	0.235	0.554
Total Nitrogen	mg/L N	0.2	<0.2	<0.2	<0.2	<0.2	0.4	1.7	1.2	0.8	2.9	2.5
Soluble Phosphorus	mg/L P	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr
Total Phosphorus	mg/L P	0.15	0.13	0.14	0.13	0.07	0.08	0.16	0.16	0.16	0.34	0.29
Escherichia Coliform	MPN/100 mL	20	120	260	160	<10	<10	80	50	10	80	70
Fecal Coliform	MPN/100 mL	20	10	150	100	<10	<10	100	60	20	240	120

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

Red River elevation at South Floodway control gates: 734.19 ft

Weather conditions during monitoring:

Wind Direction: West (W)

Wind Speed: 11 km/h

Cloud Coverage: 100%

Precipitation: 6.2 mm

Air Temperature: 10°C

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Date Compiled: 30-Mar-22