



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: May 13, 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		391570	391578	391569	391577	391709	391592	391585	391590	391591	391588	391587
Temperature	° C	15.5	15.7	15.0	16.6	15.0	15.4	15.8	13.7	13.8	13.3	13.5
Dissolved Oxygen	mg/L	11.0	10.7	9.9	9.7	12.2	12.1	13.1	14.7	13.7	13.7	11.0
Oxygen Saturation	%	110	108	98	99	121	121	130	143	132	131	104
Biochemical Oxygen Demand	mg/L	6	4	4	<4	<4	<4	<4	<4	<4	<4	<4
pH	units	8.65	8.64	8.61	8.65	8.86	8.90	8.88	8.94	8.87	8.82	8.76
Total Solids	mg/L	652	650	638	626	680	682	716	730	718	684	686
Total Suspended Solids	mg/L	53	57	58	39	24	16	16	18	18	19	8
Turbidity	n.t.u.	30	31	31	23	12	11	11	12	13	13	5
Total Organic Carbon	mg/L	12.4	12.1	12.2	11.8	13.1	12.7	13.2	13.8	13.2	13.2	12.5
Chlorophyll a	ug/L	31.4	26.7	23.4	22.0	22.7	16.0	32.7	86.8	68.8	68.1	29.4
Ammonia Nitrogen	mg/L N	0.026	0.031	0.023	0.027	0.058	0.060	0.240	0.120	0.080	0.534	0.499
Nitrate Nitrogen	mg/L N	0.008	<0.003	0.003	0.013	<0.003	<0.003	0.006	0.026	0.016	0.066	0.334
Total Nitrogen	mg/L N	0.6	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.0	1.7	1.8
Soluble Phosphorus	mg/L P	0.07	0.08	0.09	0.14	nr	0.07	nr	0.08	0.07	0.09	0.16
Total Phosphorus	mg/L P	0.20	0.19	0.20	0.16	0.06	0.06	0.10	0.10	0.11	0.18	0.15
Escherichia Coliform	MPN/100 mL	<10	<10	30	50	<10	<10	50	<10	<10	10	20
Fecal Coliform	MPN/100 mL	10	10	10	20	<10	10	20	<10	10	<10	<10

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

Red River elevation at South Floodway control gates: 734.84 ft

Weather conditions during monitoring:

Wind Direction: South-South West (SSW)

Wind Speed: 15 km/h

Cloud Coverage: 20%

Precipitation: <0.1 mm

Air Temperature: 15°C

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