



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: August 5, 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		413282	413285	413278	413284	413290	413297	413292	413295	413296	413294	413293
Temperature	° C	21.3	21.2	20.6	22.3	22.2	22.6	22.4	22.4	22.4	22.4	22.4
Dissolved Oxygen	mg/L	6.5	6.7	7.3	5.5	9.3	11.1	8.9	7.6	5.9	6.4	7.3
Oxygen Saturation	%	73	75	81	64	107	128	102	88	68	74	84
Biochemical Oxygen Demand	mg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	4	5
pH	units	8.42	8.35	8.30	8.24	8.70	8.72	8.56	8.37	8.19	7.90	8.16
Total Solids	mg/L	826	802	758	762	712	696	706	712	712	712	716
Total Suspended Solids	mg/L	79	62	27	17	13	13	24	15	16	18	12
Turbidity	n.t.u.	49	47	23	19	13	16	23	13	14	12	8
Total Organic Carbon	mg/L	11.1	10.6	11.1	10.3	12.4	12.5	13.1	12.4	11.6	12.7	13.0
Chlorophyll a	ug/L	26.7	22.7	16.0	9.3	22.7	21.4	14.7	28.0	9.3	17.4	24.0
Ammonia Nitrogen	mg/L N	0.035	0.053	0.121	0.146	0.111	0.397	0.703	0.652	0.610	>2.00	1.27
Nitrate Nitrogen	mg/L N	0.052	0.020	0.031	0.015	0.360	0.224	0.357	0.468	0.418	0.465	0.380
Total Nitrogen	mg/L N	0.8	0.8	0.9	0.8	1.4	1.8	2.1	2.2	2.1	4.5	3.4
Soluble Phosphorus	mg/L P	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr
Total Phosphorus	mg/L P	0.20	0.21	0.17	0.20	0.19	0.19	0.22	0.29	0.26	0.57	0.51
Escherichia Coliform	MPN/100 mL	80	60	190	200	<10	10	10	30	110	20	10
Fecal Coliform	MPN/100 mL	40	20	210	180	<10	10	60	10	140	30	10

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: North (N)

Wind Speed: 30 km/h

Cloud Coverage: 100%

Precipitation: 0.9 mm

Air Temperature: 18°C

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