



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: July 8, 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		405816	405819	405812	405818	405824	405831	405825	405829	405830	405828	405827
Temperature	° C	21.3	21.6	21.2	22.2	24.1	24.2	24.3	23.3	22.4	22.9	22.7
Dissolved Oxygen	mg/L	8.5	8.3	8.0	7.6	6.3	6.6	6.9	6.5	6.4	5.5	8.0
Oxygen Saturation	%	96	94	90	87	75	78	82	76	74	63	93
Biochemical Oxygen Demand	mg/L	<4	<4	4	<4	<4	<4	<4	<4	<4	4	4
pH	units	8.60	8.60	8.52	8.43	8.01	8.01	8.06	8.01	8.15	7.76	7.90
Total Solids	mg/L	936	868	956	830	786	754	948	840	806	792	782
Total Suspended Solids	mg/L	109	104	83	42	25	15	21	23	28	24	6
Turbidity	n.t.u.	66	54	29	29	14	13	16	17	19	16	7
Total Organic Carbon	mg/L	17.0	15.0	16.1	14.6	13.4	12.5	12.8	13.7	13.8	14.8	13.8
Chlorophyll a	ug/L	41.4	33.4	30.0	29.4	6.7	12.0	13.4	27.4	36.0	40.7	8.7
Ammonia Nitrogen	mg/L N	0.020	0.045	0.022	0.015	0.154	0.129	0.426	0.709	0.337	1.71	1.05
Nitrate Nitrogen	mg/L N	<0.003	0.004	<0.003	<0.003	0.704	0.705	0.678	0.536	0.277	0.181	0.147
Total Nitrogen	mg/L N	0.7	1.2	0.9	1.1	1.9	1.6	1.5	2.1	1.4	3.4	2.2
Soluble Phosphorus	mg/L P	0.23	0.13	0.16	0.16	0.28	nr	nr	0.27	0.24	0.45	nr
Total Phosphorus	mg/L P	0.34	0.29	0.29	0.25	0.29	0.20	0.21	0.25	0.20	0.44	0.36
Escherichia Coliform	MPN/100 mL	<10	<10	40	130	30	<10	<10	10	40	10	<10
Fecal Coliform	MPN/100 mL	20	10	40	150	40	20	<10	80	10	20	20

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: South (S)

Wind Speed: 13 km/h

Cloud Coverage: 70%

Precipitation: <0.1 mm

Air Temperature: 21°C

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