



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: June 10, 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		398661	398668	398657	398667	398670	398676	398671	398674	398675	398673	398672
Temperature	°C	21.0	21.2	20.6	21.3	22.3	21.7	22.2	21.5	21.4	21.1	21.0
Dissolved Oxygen	mg/L	7.4	7.8	7.4	5.8	6.9	7.0	7.1	6.7	5.8	5.4	8.5
Oxygen Saturation	%	84	88	82	65	79	80	82	75	66	60	95
Biochemical Oxygen Demand	mg/L	>7	>7	5	>7	>7	5	>8	>8	<4	4	4
pH	units	8.39	8.38	8.29	8.13	8.39	8.39	8.30	8.31	8.20	7.96	8.02
Total Solids	mg/L	688	686	682	552	632	668	618	662	616	626	674
Total Suspended Solids	mg/L	60	56	56	37	17	17	23	19	14	27	10
Turbidity	n.t.u.	34	31	37	24	12	12	15	17	15	20	7
Total Organic Carbon	mg/L	10.8	10.7	11.0	9.7	12.4	12.3	12.6	12.3	11.5	12.4	12.2
Chlorophyll a	ug/L	40.1	40.1	37.4	32.0	10.0	9.3	13.4	6.7	7.3	8.0	2.0
Ammonia Nitrogen	mg/L N	0.043	0.036	0.023	0.178	0.081	0.108	0.404	0.534	0.354	0.682	0.915
Nitrate Nitrogen	mg/L N	0.050	<0.003	<0.003	0.175	0.058	0.059	0.066	0.122	0.168	0.198	0.214
Total Nitrogen	mg/L N	0.7	0.7	0.7	1.0	0.7	0.6	1.1	1.0	1.2	1.7	1.8
Soluble Phosphorus	mg/L P	0.07	0.07	0.07	0.08	0.12	0.10	0.12	0.13	0.13	nr	0.20
Total Phosphorus	mg/L P	0.16	0.18	0.20	0.19	0.15	0.14	0.16	0.16	0.16	0.22	0.23
Escherichia Coliform	MPN/100 mL	60	10	410	9,800	30	<10	750	390	6,490	19,900	90
Fecal Coliform	MPN/100 mL	40	30	520	4,610	10	<10	740	230	5,170	17,300	130

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

Red River elevation at South Floodway control gates: 734.86 ft

Weather conditions during monitoring:

Wind Direction: North East (NE)

Wind Speed: 20 km/h

Cloud Coverage: 100%

Precipitation: 33 mm

Air Temperature: 18°C

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