



2020 RIVERS SURVEY MONITORING REPORT

Survey Date: July 4, 2020		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		311997	312013	311992	311999	312017	312024	312019	312022	312023	312021	312020
Temperature	° C	24.5	25.1	25.1	25.9	25.0	25.1	25.0	25.4	25.7	25.2	25.5
Dissolved Oxygen	mg/L	6.0	6.0	6.5	5.6	6.0	6.4	6.3	6.2	5.8	5.7	7.3
Oxygen Saturation	%	72	72	78	69	73	78	76	76	71	70	89
Biochemical Oxygen Demand	mg/L	>14	>14	>14	>14	>10	>10	>10	>10	>14	>14	>14
pH	units	7.39	7.61	7.80	7.66	7.46	7.47	7.45	7.56	7.64	7.55	7.62
Total Solids	mg/L	1,550	1,520	1,630	1,640	1,050	898	1,060	934	1,130	876	874
Total Suspended Solids	mg/L	700	712	872	828	316	208	294	234	458	192	220
Turbidity	n.t.u.	362	350	363	384	184	126	187	145	222	105	136
Total Organic Carbon	mg/L	12.7	17.6	12.4	16.9	19.7	20.5	24.6	21.8	22.1	18.4	19.6
Chlorophyll a	ug/L	10.7	13.4	21.4	26.7	2.7	2.7	4.0	2.7	13.4	14.7	8.0
Ammonia Nitrogen	mg/L N	0.125	0.116	0.120	0.132	0.003	<0.003	0.021	0.027	0.061	0.089	0.060
Nitrate Nitrogen	mg/L N	3.89	2.80	0.761	0.174	1.14	1.09	1.00	0.929	0.743	0.805	0.941
Total Nitrogen	mg/L N	5.7	4.5	1.6	1.4	2.3	2.2	2.2	2.1	1.9	1.9	2.2
Soluble Phosphorus	mg/L P	0.11	0.12	0.16	0.12	0.31	0.28	0.28	0.25	0.17	0.23	0.21
Total Phosphorus	mg/L P	0.63	0.61	0.71	0.72	0.44	0.37	0.42	0.39	0.49	0.39	0.43
Escherichia Coliform	MPN/100 mL	260	500	370	650	110	40	100	80	290	330	230
Fecal Coliform	MPN/100 mL	370	810	390	640	120	100	100	50	400	360	440

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

Red River elevation at South Floodway control gates: 738.9 ft

Weather conditions during monitoring:

Wind Direction: West (W)

Wind Speed: 11 km/h

Cloud Coverage: 100%

Precipitation: 10.4 mm

Air Temperature: 20°C

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