



## 2021 RIVERS SURVEY MONITORING REPORT

Survey Date: <b>October 28, 2021</b>		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		<b>434609</b>	<b>434615</b>	<b>434605</b>	<b>434611</b>	<b>434618</b>	<b>434626</b>	<b>434621</b>	<b>434624</b>	<b>434625</b>	<b>434623</b>	<b>434622</b>
Temperature	° C	6.3	6.3	6.5	6.8	ns	7.0	7.0	6.7	6.8	7.6	7.1
Dissolved Oxygen	mg/L	11.8	11.9	11.6	11.1	ns	11.2	11.3	11.8	11.1	10.6	12.0
Oxygen Saturation	%	95	96	95	91	ns	93	93	91	90	89	99
Biochemical Oxygen Demand	mg/L	na	na	na	na	ns	na	na	na	na	na	na
pH	units	8.57	8.58	8.54	8.52	ns	8.42	8.41	8.90	8.52	8.26	8.11
Total Solids	mg/L	650	686	810	688	ns	944	878	1,010	954	790	864
Total Suspended Solids	mg/L	18	14	9	28	ns	96	84	52	28	24	8
Turbidity	n.t.u.	12	11	11	22	ns	65	59	41	25	19	9
Total Organic Carbon	mg/L	7.6	7.1	25.6	7.6	ns	9.3	9.5	9.1	8.5	9.2	9.7
Chlorophyll a	ug/L	9.3	9.3	10.7	13.4	ns	13.4	17.4	33.4	32.0	29.4	9.3
Ammonia Nitrogen	mg/L N	0.032	0.026	0.096	0.069	ns	0.055	0.326	0.312	0.384	0.910	1.100
Nitrate Nitrogen	mg/L N	0.425	0.340	0.362	0.363	ns	0.650	0.637	0.670	0.443	0.543	0.597
Total Nitrogen	mg/L N	1.0	0.9	2.1	1.0	ns	1.6	1.7	1.7	1.6	2.1	2.6
Soluble Phosphorus	mg/L P	nr	nr	nr	nr	ns	nr	nr	nr	nr	nr	nr
Total Phosphorus	mg/L P	0.19	0.12	0.15	0.19	ns	0.32	0.31	0.33	0.30	0.37	0.38
Escherichia Coliform	MPN/100 mL	60	50	120	610	ns	80	100	160	2,010	7,700	50
Fecal Coliform	MPN/100 mL	40	80	170	640	ns	120	40	130	1,860	4,110	50

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

Red River elevation at South Floodway control gates: 727.85 ft

Weather conditions during monitoring:

Wind Direction: North West (NW)

Wind Speed: 17 km/h

Cloud Coverage: 100%

Precipitation: 9.6 mm

Air Temperature: 6°C

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