



## 2021 RIVERS SURVEY MONITORING REPORT

Survey Date: <b>October 14, 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>431122</b>	<b>431130</b>	<b>431119</b>	<b>431128</b>	<b>431134</b>	<b>431140</b>	<b>431135</b>	<b>431138</b>	<b>431139</b>	<b>431137</b>	<b>431136</b>
Temperature	° C	10.3	8.9	10.6	10.6	13.3	12.9	13.1	13.2	12.6	13.2	13.6
Dissolved Oxygen	mg/L	11.1	11.5	10.7	9.4	9.2	9.2	8.2	7.3	7.5	6.5	9.3
Oxygen Saturation	%	99	103	96	85	87	87	78	69	70	62	90
Biochemical Oxygen Demand	mg/L	na	na	na	na	na	na	na	na	na	<4	>7
pH	units	8.67	8.72	8.64	8.62	8.50	8.61	8.23	8.08	8.13	7.71	7.94
Total Solids	mg/L	662	672	678	610	680	748	652	668	660	646	694
Total Suspended Solids	mg/L	32	21	11	24	8	6	19	6	8	8	14
Turbidity	n.t.u.	21	23	25	23	20	13	14	9	9	7	5
Total Organic Carbon	mg/L	8.7	9.6	10.2	10.6	8.7	9.1	9.5	10.2	10.3	11.1	10.7
Chlorophyll a	ug/L	56.1	56.1	60.7	46.1	6.0	5.3	4.7	2.7	7.3	4.0	1.3
Ammonia Nitrogen	mg/L N	0.014	0.010	0.028	0.057	0.150	0.126	1.100	1.310	0.750	>2.000	1.800
Nitrate Nitrogen	mg/L N	0.288	0.123	0.048	0.031	0.373	0.577	0.527	0.632	0.444	0.408	0.536
Total Nitrogen	mg/L N	0.4	0.4	0.5	0.5	0.7	0.9	2.1	2.6	1.8	4.4	3.5
Soluble Phosphorus	mg/L P	0.16	nr	0.13	0.13	nr	nr	nr	nr	nr	nr	nr
Total Phosphorus	mg/L P	0.17	0.14	0.13	0.14	0.08	0.05	0.15	0.19	0.15	0.38	0.34
Escherichia Coliform	MPN/100 mL	260	280	590	1,720	240	90	150	2,850	1,400	19,900	240
Fecal Coliform	MPN/100 mL	260	320	460	17,300	200	110	190	2,760	1,790	24,200	210

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

Red River elevation at South Floodway control gates: nr

Weather conditions during monitoring:

Wind Direction: West (W)

Wind Speed: 22 km/h

Cloud Coverage: 100%

Precipitation: 10.5 mm

Air Temperature: 7°C

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