



2020 RIVERS SURVEY MONITORING REPORT

Survey Date: October 22, 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		340787	340791	340782	340789	340795	340802	340797	340800	340801	340799	340798
Temperature	° C	1.3	1.3	1.4	1.8	4.0	3.9	4.5	4.0	3.5	3.6	4.8
Dissolved Oxygen	mg/L	13.5	13.8	13.7	13.3	12.3	12.2	11.9	11.8	12.2	11.4	13.2
Oxygen Saturation	%	96	98	97	96	94	94	91	90	93	90	103
Biochemical Oxygen Demand	mg/L	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr
pH	units	8.63	8.72	8.60	8.70	8.72	8.67	8.47	8.54	8.57	8.56	8.51
Total Solids	mg/L	642	654	650	670	634	622	618	586	590	576	566
Total Suspended Solids	mg/L	11	12	10	27	24	22	19	6	7	7	<3.0
Turbidity	n.t.u.	10	10	8	8	19	20	15	9	10	8	5
Total Organic Carbon	mg/L	7.3	7.3	7.9	8.0	11.4	10.7	11.1	10.6	10.5	10.4	10.6
Chlorophyll a	ug/L	14.7	16.7	17.4	21.4	8.7	7.3	5.3	2.7	5.3	6.0	2.0
Ammonia Nitrogen	mg/L N	0.064	0.008	0.009	0.021	0.051	0.359	0.448	0.663	0.354	0.825	0.849
Nitrate Nitrogen	mg/L N	0.361	0.339	0.314	0.317	0.186	0.258	0.228	0.282	0.236	0.841	0.364
Total Nitrogen	mg/L N	0.9	0.8	0.7	0.9	1.0	1.0	1.4	1.4	1.3	1.8	2.1
Soluble Phosphorus	mg/L P	nr	0.10	0.11	0.08	0.10	0.13	0.16	0.16	0.13	0.15	0.22
Total Phosphorus	mg/L P	0.19	0.19	0.22	0.18	0.18	0.17	0.22	0.18	0.18	0.24	0.28
Escherichia Coliform	MPN/100 mL	100	100	60	130	10	20	30	80	40	90	60
Fecal Coliform	MPN/100 mL	40	160	90	110	30	30	50	40	70	100	40

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

Red River elevation at South Floodway control gates: 729.89 ft

Weather conditions during monitoring:

Wind Direction: North East (NE)

Wind Speed: 13 km/h

Cloud Coverage: 20%

Precipitation: 0.2 mm

Air Temperature: -2°C

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