



2020 RIVERS SURVEY MONITORING REPORT

Survey Date: September 10, 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		329776	329780	329771	329778	329784	329791	329786	329789	329790	329788	329787
Temperature	° C	12.8	12.8	12.2	12.8	16.2	15.8	16.1	15.2	14.9	14.7	15.1
Dissolved Oxygen	mg/L	11.6	11.6	11.3	11.1	9.1	9.2	9.1	9.0	9.3	9.0	9.9
Oxygen Saturation	%	109	110	105	105	93	93	92	90	92	89	98
Biochemical Oxygen Demand	mg/L	4	5	4	5	<4	<4	<4	7	5	5	>7
pH	units	8.57	8.58	8.59	8.48	8.09	8.09	8.10	8.08	8.16	8.08	8.08
Total Solids	mg/L	702	644	686	678	728	686	700	660	670	674	654
Total Suspended Solids	mg/L	33	42	47	49	106	63	48	36	27	19	7
Turbidity	n.t.u.	28	27	30	31	66	45	34	27	22	17	8
Total Organic Carbon	mg/L	11.3	11.7	12.2	13.1	13.9	13.7	14.1	13.3	13.0	13.7	13.5
Chlorophyll a	ug/L	44.1	44.7	40.1	38.7	6.7	7.3	6.7	4.7	9.3	8.0	2.0
Ammonia Nitrogen	mg/L N	0.010	<0.003	0.212	0.008	<0.003	0.037	0.087	0.133	0.063	0.289	0.274
Nitrate Nitrogen	mg/L N	0.028	0.024	0.041	0.020	0.431	0.458	0.432	0.494	0.405	0.467	0.524
Total Nitrogen	mg/L N	0.6	0.6	0.7	0.8	1.4	1.4	1.8	1.5	1.3	1.8	1.7
Soluble Phosphorus	mg/L P	0.07	0.11	0.06	0.06	0.26	0.22	0.27	0.31	0.23	0.27	0.29
Total Phosphorus	mg/L P	0.25	0.22	0.22	0.19	0.33	0.30	0.27	0.29	0.24	0.29	0.28
Escherichia Coliform	MPN/100 mL	280	200	270	110	20	50	10	110	20	50	160
Fecal Coliform	MPN/100 mL	250	190	310	200	60	30	10	160	40	20	190

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

Red River elevation at South Floodway control gates: 734.15 ft

Weather conditions during monitoring:

Wind Direction: South West (SW)

Wind Speed: 17 km/h

Cloud Coverage: 5%

Precipitation: <0.1 mm

Air Temperature: 13°C

Compiled By: H. Demchenko
Compliance Reporting Technician

Approved By: B. Bradford
Analytical Services Branch Head

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*Pierre Delorme Bridge was used as an alternate location for the South Floodway Control