



2019 RIVERS SURVEY MONITORING REPORT

Survey Date: October 31, 2019		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		253541	253543	253540	253542	253545	253551	253546	253549	253550	253548	253547
Temperature	° C	0.6	0.4	0.6	0.8	5.9	4.8	5.5	2.7	2.8	2.4	2.8
Dissolved Oxygen	mg/L	13.7	14.0	13.8	13.7	11.9	12.2	12.1	11.6	11.8	12.0	11.8
Oxygen Saturation	%	95	97	96	96	95	94	95	85	87	87	87
Biochemical Oxygen Demand	mg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	units	8.30	8.33	8.31	8.27	7.92	8.02	7.84	7.90	7.93	7.89	7.88
Total Solids	mg/L	998	1,010	992	870	722	708	730	720	740	720	750
Total Suspended Solids	mg/L	230	236	230	113	43	39	40	48	62	61	71
Turbidity	n.t.u.	118	119	117	70	30	31	35	39	42	39	48
Total Organic Carbon	mg/L	13.6	14.0	13.5	13.8	13.6	13.6	14.0	13.4	13.9	14.7	12.4
Chlorophyll a	ug/L	32.0	33.4	30.7	25.4	4.0	2.7	2.7	2.7	4.0	5.3	4.0
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.010	0.033	0.936	0.020	0.110	0.036	0.078	0.061	0.087
Nitrate Nitrogen	mg/L N	0.302	0.301	0.314	0.322	0.612	0.589	0.607	0.594	0.584	0.590	0.616
Total Nitrogen	mg/L N	0.9	1.1	0.9	1.0	1.6	1.2	1.2	1.2	1.2	1.3	1.7
Soluble Phosphorus	mg/L P	0.25	0.24	0.25	0.22	0.23	0.24	0.23	0.24	0.27	0.25	0.26
Total Phosphorus	mg/L P	0.34	0.32	0.32	0.29	0.24	0.24	0.22	0.24	0.25	0.23	0.28
Escherichia Coliform	MPN/100 mL	60	30	40	30	10	10	10	40	10	20	40
Fecal Coliform	MPN/100 mL	40	20	40	20	20	10	50	20	30	60	40

Notes: NS - No Sample NA - Not Analyzed NR - No Result

Red River elevation at South Floodway control gates: 744.3 ft

Weather conditions during monitoring:

Wind Direction: NW

Wind Speed: 10.1 km/h

Cloud Coverage: 20%

Precipitation: 0 mm

Air Temperature: 2.4°C

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