



## 2020 RIVERS SURVEY MONITORING REPORT

Survey Date: September 24, 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		<b>333531</b>	<b>333537</b>	<b>333526</b>	<b>333535</b>	<b>333539</b>	<b>333546</b>	<b>333541</b>	<b>333544</b>	<b>333545</b>	<b>333543</b>	<b>333542</b>
Temperature	° C	13.9	14.0	13.7	13.7	15.3	15.5	15.6	14.7	14.3	14.5	14.3
Dissolved Oxygen	mg/L	10.4	10.7	10.2	9.6	9.3	9.4	9.3	9.2	9.3	9.1	9.8
Oxygen Saturation	%	101	103	98	92	93	94	94	92	91	82	96
Biochemical Oxygen Demand	mg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
pH	units	8.58	8.68	8.63	8.64	8.40	8.36	8.31	8.37	8.43	8.32	8.26
Total Solids	mg/L	670	666	664	772	580	558	558	562	590	640	610
Total Suspended Solids	mg/L	42	40	43	35	25	16	15	6	9	8	4
Turbidity	n.t.u.	27	27	29	24	21	15	13	8	9	9	5
Total Organic Carbon	mg/L	12.0	11.3	11.8	11.6	13.8	13.2	13.5	13.2	12.6	13.1	12.8
Chlorophyll a	ug/L	62.1	48.7	46.7	42.7	7.3	6.0	5.3	2.7	6.7	4.0	1.3
Ammonia Nitrogen	mg/L N	<0.003	0.005	<0.003	0.003	0.018	0.032	0.244	0.244	0.156	0.571	0.334
Nitrate Nitrogen	mg/L N	0.115	0.164	0.096	0.007	0.248	0.344	0.298	0.301	0.212	0.321	0.379
Total Nitrogen	mg/L N	<0.3	<0.3	<0.3	<0.3	0.3	0.3	0.6	0.5	0.4	1.0	0.8
Soluble Phosphorus	mg/L P	0.11	0.12	0.11	0.08	0.15	0.15	0.17	0.17	0.15	0.27	0.21
Total Phosphorus	mg/L P	0.24	0.20	0.23	0.19	0.18	0.17	0.20	0.18	0.17	0.35	0.23
Escherichia Coliform	MPN/100 mL	720	750	710	590	180	290	160	90	70	50	60
Fecal Coliform	MPN/100 mL	650	1,150	540	390	200	290	210	60	110	60	60

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

Red River elevation at South Floodway control gates: 734.09 ft

Weather conditions during monitoring:

Wind Direction: South (S)

Wind Speed: 15 km/h

Cloud Coverage: 75%

Precipitation: 1 mm

Air Temperature: 12°C

Compiled By: H. Demchenko  
Compliance Reporting Technician

Approved By: B. Bradford  
Analytical Services Branch Head

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