



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: September 2, 2021		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		420407	420410	420403	420409	420415	420422	420417	420420	420421	420419	420418
Temperature	° C	19.7	20.0	19.7	20.6	19.8	20.2	19.6	19.8	20.0	19.6	19.3
Dissolved Oxygen	mg/L	8.5	8.6	8.1	7.3	8.8	9.0	8.8	9.9	7.8	7.8	8.4
Oxygen Saturation	%	93	94	88	81	96	99	96	108	86	85	92
Biochemical Oxygen Demand	mg/L	4	4	<4	<4	<4	<4	4	6	4	7	5
pH	units	8.72	8.71	8.64	8.72	8.47	8.60	8.43	8.47	8.48	8.15	7.94
Total Solids	mg/L	678	700	682	632	936	944	822	734	678	650	654
Total Suspended Solids	mg/L	77	94	75	44	22	32	27	14	18	15	5
Turbidity	n.t.u.	47	53	47	26	16	20	16	12	13	10	4
Total Organic Carbon	mg/L	10.5	10.2	9.4	9.8	10.6	10.5	11.0	11.6	10.2	10.6	10.0
Chlorophyll a	ug/L	48.1	45.4	40.1	33.4	22.7	17.4	33.4	80.1	38.7	48.1	6.7
Ammonia Nitrogen	mg/L N	<0.003	0.003	<0.003	0.110	0.008	0.014	1.42	1.030	0.521	1.56	1.78
Nitrate Nitrogen	mg/L N	0.015	0.006	0.005	<0.003	<0.003	<0.003	0.063	0.353	0.251	0.336	0.604
Total Nitrogen	mg/L N	0.4	0.6	0.8	0.4	0.7	0.6	1.9	2.2	1.2	2.5	3.0
Soluble Phosphorus	mg/L P	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr
Total Phosphorus	mg/L P	0.21	0.20	0.22	0.20	0.12	0.15	0.24	0.22	0.20	0.38	0.45
Escherichia Coliform	MPN/100 mL	30	60	80	110	<10	10	<10	50	80	200	40
Fecal Coliform	MPN/100 mL	50	20	50	150	<10	<10	40	20	90	160	20

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

Red River elevation at South Floodway control gates: 734 ft

Weather conditions during monitoring:

Wind Direction: South (S)

Wind Speed: 35 km/h

Cloud Coverage: 100%

Precipitation: <0.1 mm

Air Temperature: 20°C

Compiled By: H. Demchenko
Compliance Reporting Technician

Approved By: C. Diduck
Analytical Services Branch Head

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