



2021 RIVERS SURVEY MONITORING REPORT

Survey Date: September 29, 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		427651	427657	427646	427655	427659	427665	427660	427663	427664	427662	427661
Temperature	° C	17.7	17.6	17.3	17.8	17.0	16.7	18.1	16.7	16.4	16.3	16.8
Dissolved Oxygen	mg/L	9.7	9.8	8.9	8.7	10.5	9.9	8.8	7.4	7.6	8.3	7.5
Oxygen Saturation	%	102	102	93	91	108	103	93	76	78	84	77
Biochemical Oxygen Demand	mg/L	4	<4	<4	<4	<4	<4	<4	<4	<4	<4	7
pH	units	8.67	8.69	8.60	8.58	8.73	8.77	8.48	8.32	8.37	7.96	7.96
Total Solids	mg/L	696	712	678	682	758	762	760	758	732	708	732
Total Suspended Solids	mg/L	63	65	43	27	54	31	18	14	15	8	4
Turbidity	n.t.u.	31	34	29	21	32	20	11	7	8	5	3
Total Organic Carbon	mg/L	10.9	9.7	9.5	10.3	10.4	10.6	10.8	11.2	10.6	11.9	10.9
Chlorophyll a	ug/L	40.1	32.7	33.4	36.7	29.4	16.0	11.3	6.7	14.7	18.7	4.7
Ammonia Nitrogen	mg/L N	0.007	0.011	0.009	0.135	0.050	0.021	0.804	0.873	0.414	>2.00	1.18
Nitrate Nitrogen	mg/L N	<0.003	0.020	0.006	0.017	nr	0.032	0.211	0.207	0.145	0.280	0.365
Total Nitrogen	mg/L N	<0.2	<0.2	<0.2	0.5	0.3	<0.2	1.3	1.5	0.8	3.9	2.5
Soluble Phosphorus	mg/L P	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr
Total Phosphorus	mg/L P	0.13	0.14	0.11	0.13	0.10	0.08	0.20	0.19	0.15	0.43	0.35
Escherichia Coliform	MPN/100 mL	180	300	310	120	440	60	<10	20	70	40	10
Fecal Coliform	MPN/100 mL	250	410	290	50	200	130	20	<10	20	20	<10

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

Red River elevation at South Floodway control gates: 734.02 ft

Weather conditions during monitoring:

Wind Direction: South (S)

Wind Speed: 28 km/h

Cloud Coverage: 25%

Precipitation: <0.1 mm

Air Temperature: 26°C

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