



2019 RIVERS SURVEY MONITORING REPORT

Survey Date: July 25, 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		225327	225329	225326	225328	225330	225336	225331	225334	225335	225333	225332
Temperature	° C	24.5	24.9	24.3	25.6	25.3	25.7	25.5	24.9	24.8	24.2	24.3
Dissolved Oxygen	mg/L	7.8	7.3	7.3	6.3	6.2	6.0	6.2	6.0	6.2	6.5	7.4
Oxygen Saturation	%	94	88	87	77	75	73	75	73	74	78	89
Biochemical Oxygen Demand	mg/L	6	6	>6	7	5	5	<4	6	<4	<4	<4
pH	units	8.58	8.54	8.54	8.63	7.81	7.99	7.86	7.91	7.96	7.98	7.94
Total Solids	mg/L	868	894	888	768	842	830	802	854	812	816	824
Total Suspended Solids	mg/L	192	200	192	92	74	66	62	83	91	88	126
Turbidity	n.t.u.	102	96	130	105	34	24	38	53	49	49	79
Total Organic Carbon	mg/L	10.6	10.0	10.8	12.1	16.6	17.1	16.5	17.3	15.3	15.7	14.8
Chlorophyll a	ug/L	40.1	25.4	40.1	32.0	12.0	13.4	12.0	12.0	12.0	12.0	13.4
Ammonia Nitrogen	mg/L N	<0.003	0.013	0.096	0.024	0.009	0.024	0.021	0.048	0.075	0.138	0.115
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.595	0.610	0.615	0.668	0.647	0.679	0.726
Total Nitrogen	mg/L N	0.5	0.6	0.6	0.6	1.5	1.6	1.6	1.6	1.6	1.7	1.7
Soluble Phosphorus	mg/L P	0.12	0.22	0.15	0.18	0.36	0.38	0.34	0.36	0.38	0.36	0.35
Total Phosphorus	mg/L P	0.34	0.38	0.38	0.28	0.43	0.42	0.39	0.40	0.43	0.46	0.48
Escherichia Coliform	MPN/100 mL	<10	10	30	160	<10	10	20	20	30	50	90
Fecal Coliform	MPN/100 mL	10	60	40	100	30	20	40	<10	20	50	150

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

Red River elevation at South Floodway control gates: 734.9 ft

Weather conditions during monitoring:

Wind Direction: SW
 Wind Speed: 9.8 km/h
 Cloud Coverage: 30%
 Precipitation: 0.8 mm
 Air Temperature: 29°C

Compiled By: A. Gordon
 Compliance Reporting Technician

Approved By: C. Diduck
 Analytical Services Branch Head

Date Compiled: 21-Nov-19