



2019 RIVERS SURVEY MONITORING REPORT

Survey Date: August 8, 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		229583	229585	229582	229584	229586	229592	229587	229590	229591	229589	229588
Temperature	° C	21.5	21.7	20.6	22.4	23.6	23.7	24.3	23.5	23.0	22.7	22.9
Dissolved Oxygen	mg/L	7.9	8.1	7.8	7.4	7.4	7.4	7.5	7.1	7.2	7.3	8.6
Oxygen Saturation	%	89	92	87	89	87	87	89	84	84	84	100
Biochemical Oxygen Demand	mg/L	4	5	6	6	<4	<4	<4	<4	<4	7	<4
pH	units	8.59	8.52	8.48	8.97	8.19	8.19	8.07	8.17	8.17	7.79	7.79
Total Solids	mg/L	1,020	1,050	1,020	1,010	1,020	874	1,030	864	852	850	978
Total Suspended Solids	mg/L	78	84	95	51	58	34	39	49	33	36	22
Turbidity	n.t.u.	58	61	70	44	42	32	28	36	27	27	19
Total Organic Carbon	mg/L	14.6	13.4	19.8	13.7	18.0	18.9	17.9	18.7	16.8	16.8	17.0
Chlorophyll a	ug/L	22.7	18.7	18.7	23.4	6.7	7.3	10.0	6.0	8.7	8.7	7.3
Ammonia Nitrogen	mg/L N	0.016	<0.003	<0.003	<0.003	<0.003	<0.003	0.055	0.081	0.043	0.414	0.252
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.404	0.402	0.389	0.446	0.404	0.442	0.535
Total Nitrogen	mg/L N	0.9	0.6	NR	0.7	1.2	1.9	1.4	1.4	1.3	1.9	1.8
Soluble Phosphorus	mg/L P	0.11	0.12	0.14	0.13	0.31	0.29	0.28	0.29	0.27	0.32	0.31
Total Phosphorus	mg/L P	0.24	0.23	0.29	0.24	0.31	0.26	0.29	0.27	0.27	0.35	0.30
Escherichia Coliform	MPN/100 mL	30	10	100	60	10	<10	20	50	40	20	80
Fecal Coliform	MPN/100 mL	10	10	20	30	20	20	<10	40	30	50	30

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

Red River elevation at South Floodway control gates: 733.7 ft

Weather conditions during monitoring:

Wind Direction: NW
Wind Speed: 9.8 km/h
Cloud Coverage: 50%
Precipitation: 0.5 mm
Air Temperature: 24°C

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