



## 2019 RIVERS SURVEY MONITORING REPORT

Survey Date: September 5, 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		<b>238033</b>	<b>238035</b>	<b>238032</b>	<b>238034</b>	<b>238036</b>	<b>238042</b>	<b>238037</b>	<b>238040</b>	<b>238041</b>	<b>238039</b>	<b>238038</b>
Temperature	° C	17.3	17.0	16.8	17.6	18.8	18.5	18.6	17.5	17.3	17.2	17.7
Dissolved Oxygen	mg/L	10.5	10.4	9.7	9.2	8.8	8.8	8.7	8.6	8.5	8.2	9.6
Oxygen Saturation	%	109	108	99	96	94	93	93	89	88	85	101
Biochemical Oxygen Demand	mg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
pH	units	8.85	8.88	8.85	8.87	8.40	8.40	8.34	8.32	8.39	8.32	8.32
Total Solids	mg/L	792	806	794	784	714	708	684	714	736	732	724
Total Suspended Solids	mg/L	67	70	61	49	46	48	41	34	13	27	4
Turbidity	n.t.u.	40	38	35	32	34	34	30	27	16	21	7
Total Organic Carbon	mg/L	13.2	13.4	12.5	13.3	11.3	11.2	11.5	11.7	11.7	12.0	12.3
Chlorophyll a	ug/L	58.7	54.7	52.1	42.7	6.7	6.7	6.7	5.3	12.0	9.8	4.0
Ammonia Nitrogen	mg/L N	0.035	0.012	0.148	0.055	0.007	0.088	0.498	0.280	0.228	0.285	0.177
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.279	0.285	0.326	0.468	0.384	0.461	0.395
Total Nitrogen	mg/L N	1.1	1.1	0.9	1.1	1.0	1.0	1.2	1.2	1.3	1.7	1.5
Soluble Phosphorus	mg/L P	0.22	0.14	0.19	0.16	0.18	0.17	NR	0.22	0.18	0.22	0.25
Total Phosphorus	mg/L P	0.26	0.23	0.27	0.22	0.19	0.18	0.24	0.20	0.20	0.22	0.27
Escherichia Coliform	MPN/100 mL	110	210	300	580	40	20	60	30	100	460	370
Fecal Coliform	MPN/100 mL	200	230	540	580	20	<10	90	60	240	560	470

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

Red River elevation at South Floodway control gates: 734.1 ft

Weather conditions during monitoring:

Wind Direction: NE  
 Wind Speed: 5.2 km/h  
 Cloud Coverage: 40%  
 Precipitation: 0.2 mm  
 Air Temperature: 24°C

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