

**City of Winnipeg
Water and Waste Department**

2018 RIVERS SURVEY MONITORING REPORT

Survey Date: October 25, 2018		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 ¹ (R5)	SOUTH PERIMETER BRIDGE (R6)	FORT GARRY BRIDGE (R7)	NORWOOD BRIDGE (R8)	REDWOOD BRIDGE (R9)	NORTH PERIMETER BRIDGE (R10)	LOCKPORT BRIDGE (R11)
Sample Number		151327	151329	151326	151328	151330	151336	151331	151334	151335	151333	151332
Temperature	° C	4.7	6.1	5.4	4.9	6.7	6.0	5.7	5.3	6.4	7.1	7.3
Dissolved Oxygen	mg/L	12.7	11.7	12.7	12.5	12.3	11.4	12.1	11.7	11.3	11.6	12.1
Oxygen Saturation	%	98.3	94.1	100	97.1	100	91.6	96.2	92.1	91.4	95.5	100
Biochemical Oxygen Demand	mg/L	4	4	4	4	<4	<4	<4	<4	<4	<4	4
pH	units	8.58	8.55	8.61	8.57	8.25	6.97	8.21	8.22	8.17	8.45	8.32
Total Solids	mg/L	774	766	762	768	906	908	942	914	892	824	792
Total Suspended Solids	mg/L	97	95	92	100	165	160	167	134	119	64	42
Turbidity	n.t.u.	64.5	61.5	61.6	65.0	136.2	146.4	135.6	113.6	104.0	57.0	40.8
Total Organic Carbon	mg/L	6.9	7.3	7.4	7.2	9.3	9.1	9.5	9.5	9.0	7.9	8.3
Chlorophyll a	ug/L	55.4	59.6	63.0	62.7	8.0	9.3	9.3	8.9	18.7	18.7	18.0
Ammonia Nitrogen	mg/L N	0.047	<0.003	<0.003	0.017	0.028	0.031	0.164	0.270	0.137	0.427	0.412
Nitrate Nitrogen	mg/L N	0.155	0.054	<0.003	0.017	0.555	0.535	0.493	0.420	0.335	0.341	0.357
Total Nitrogen	mg/L N	1.0	1.0	0.9	0.9	1.7	1.5	1.8	1.8	1.4	1.7	1.8
Soluble Phosphorus	mg/L P	0.174	0.119	0.164	0.147	0.234	0.213	0.227	0.245	0.217	0.284	0.247
Total Phosphorus	mg/L P	0.2700	0.2457	0.2307	0.2408	0.3247	0.3318	0.3584	0.3103	0.2876	0.2923	0.2979
Escherichia Coliform	MPN/100 mL	20	40	50	50	20	10	<10	30	160	190	20
Fecal Coliform	MPN/100 mL	10	100	30	60	10	20	20	30	130	230	80

Weather Conditions during monitoring Winds SE at 4.8 km/hr with 80% cloud cover and 1 mm of precipitation. Average air temperature during survey at 11°C

Notes: 1) Red River Floodway at South Floodway Control Gates **733.1** ft. Compiled By: H.Demchenko
Compliance Reporting Technician

Approved By: C.Diduck
Analytical Services Branch Head

Date Compiled: 9-May-19

File: N:\Environmental Standards\Analytical Services\WQ Data\Rivers & Small Streams\Rivers