



City of Winnipeg
Water and Waste Department

2022 RIVERS MONITORING

Survey Date: September 15, 2022		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		512897	512899	512896	512898	512901	512908	512903	512906	512907	512905	512904
Temperature	°C	15.9	15.9	15.8	15.9	17.5	17.1	17.7	17.3	17.0	17.3	17.2
pH	units	8.63	8.64	8.67	8.67	8.47	8.44	8.47	8.44	8.51	8.39	8.33
Dissolved Oxygen	mg/L	11.0	11.0	10.8	10.4	9.9	9.8	9.9	9.6	9.9	9.2	10.1
Oxygen Saturation	%	112	112	109	106	103	102	104	100	102	96	104
Biochemical Oxygen Demand	mg/L	<4	<4	<4	4	<4	<4	<4	<4	<4	<4	<4
Total Solids	mg/L	814	812	828	806	542	540	510	552	624	634	612
Total Suspended Solids	mg/L	86	81	88	67	30	19	15	10	26	34	7
Turbidity	n.t.u.	49	48	43	39	18	14	12	6	15	15	5
Chlorophyll a	ug/L	62.7	61.4	64.7	73.4	10.1	8.7	7.5	1.3	20.7	12.7	1.6
Total Organic Carbon	mg/L	13.0	11.0	na	10.7	15.0	11.4	10.8	11.8	11.4	12.0	11.2
Total Nitrogen	mg/L N	0.3	0.3	na	0.4	0.6	0.6	0.8	0.9	0.6	1.3	1.1
Ammonia Nitrogen	mg/L N	0.005	0.010	0.005	<0.003	0.018	0.052	0.009	0.035	<0.003	0.548	0.291
Nitrate Nitrogen	mg/L N	0.104	0.075	<0.003	0.006	0.380	0.374	0.527	0.549	0.282	0.412	0.432
Soluble Phosphorus	mg/L P	0.12	0.11	0.10	0.09	0.15	0.16	0.16	0.18	0.14	0.17	0.19
Total Phosphorus	mg/L P	0.23	0.23	na	0.24	0.18	0.19	0.21	0.21	0.19	0.22	0.23
Escherichia coli	MPN/100 mL	310	270	530	2,850	40	50	80	10	360	50	60
Fecal Coliform	MPN/100 mL	340	260	420	2,760	60	50	110	30	360	30	60

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

Weather conditions during monitoring:

Wind Direction: North-North East (NNE)
 Wind Speed: 31 km/h
 Cloud Coverage: 100 %
 Precipitation: 2.1 mm
 Air Temperature: 15 °C

Report Date:

April 27, 2023