



City of Winnipeg  
Water and Waste Department

2023 RIVERS MONITORING

Survey Date: August 17, 2023		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		595827	595829	595826	595828	595830	595836	595831	595834	595835	595833	595832
Temperature	°C	20.7	20.9	19.8	20.6	22.1	22.3	22.2	21.6	21.4	21.0	21.5
pH	units	8.52	8.50	8.54	8.56	8.43	8.34	8.40	8.42	8.43	8.22	8.30
Dissolved Oxygen	mg/L	8.3	8.4	8.5	7.6	8.0	8.2	8.4	7.7	7.2	7.0	8.4
Oxygen Saturation	%	92	94	92	83	91	94	95	86	80	78	94
Biochemical Oxygen Demand	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Total Solids	mg/L	970	966	962	962	736	750	744	736	792	780	794
Total Suspended Solids	mg/L	34	31	33	34	20	21	19	12	18	29	5
Turbidity	n.t.u.	25	23	22	24	23	22	20	11	17	30	7
Chlorophyll a	ug/L	20.0	15.5	16.7	19.4	6.0	6.7	4.7	2.0	7.3	6.4	3.6
Total Organic Carbon	mg/L	13.8	12.7	12.8	10.9	12.3	12.4	12.0	13.1	13.0	12.9	12.3
Total Nitrogen	mg/L N	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.8	2.0	1.5
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.025	<0.003	<0.003	<0.003	<0.003	0.022	0.028	0.927	0.514
Nitrate Nitrogen	mg/L N	<0.003	<0.003	0.008	<0.003	0.680	0.600	0.608	0.410	0.420	0.453	0.633
Soluble Phosphorus	mg/L P	0.27	0.04	0.10	0.05	0.19	0.19	0.18	0.17	0.15	0.24	0.23
Total Phosphorus	mg/L P	0.31	0.13	0.16	0.13	0.21	0.20	0.19	0.19	0.17	0.27	0.25
Escherichia coli	MPN/100 mL	30	10	20	130	50	30	<10	20	50	160	30
Fecal Coliform	MPN/100 mL	30	30	<10	190	20	60	40	10	30	110	30

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

Weather conditions during monitoring:

Wind Direction: North West (NW)  
 Wind Speed: 20 km/h  
 Cloud Coverage: 30 %  
 Precipitation: <0.1 mm  
 Air Temperature: 20 °C

Report Date:

December 4, 2023