



City of Winnipeg
Water and Waste Department

2023 RIVERS MONITORING

Survey Date: August 31, 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		599468	599470	599467	599469	599471	599477	599472	599475	599476	599474	599473
Temperature	°C	21.5	21.4	20.9	22.0	21.9	22.3	22.2	21.5	21.6	21.5	21.1
pH	units	8.60	8.45	8.46	8.48	8.49	8.58	8.67	8.46	8.38	8.17	8.23
Dissolved Oxygen	mg/L	8.9	9.1	9.0	8.7	9.6	10.5	11.8	9.7	8.9	7.8	9.1
Oxygen Saturation	%	100	103	100	99	108	120	135	109	99	87	101
Biochemical Oxygen Demand	mg/L	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr
Total Solids	mg/L	924	870	900	888	744	684	618	526	590	704	802
Total Suspended Solids	mg/L	50	35	33	26	42	39	29	14	23	28	6
Turbidity	n.t.u.	28	25	27	25	31	30	29	16	22	23	7
Chlorophyll a	ug/L	14.0	10.7	12.0	14.7	20.0	32.7	48.1	6.2	7.3	4.0	3.1
Total Organic Carbon	mg/L	11.3	12.1	11.3	11.0	11.2	11.7	12.7	11.0	9.9	11.9	12.3
Total Nitrogen	mg/L N	0.5	0.6	0.5	0.6	0.9	0.9	0.8	0.9	0.9	2.7	2.4
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.015	0.003	<0.003	<0.003	0.027	0.024	1.020	0.587
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	0.005	0.286	0.257	0.143	0.357	0.312	0.596	0.684
Soluble Phosphorus	mg/L P	0.03	0.03	0.04	0.05	0.08	0.06	0.08	0.10	0.10	0.19	0.20
Total Phosphorus	mg/L P	0.14	0.12	0.15	0.14	0.20	0.18	0.15	0.33	0.15	0.31	0.27
Escherichia coli	MPN/100 mL	<10	80	150	60	20	20	50	<10	<10	50	170
Fecal Coliform	MPN/100 mL	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr

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

Weather conditions during monitoring:

Wind Direction: South (S)
 Wind Speed: 31 km/h
 Cloud Coverage: 100 %
 Precipitation: <0.1 mm
 Air Temperature: 23 °C

Report Date:

December 6, 2023