



City of Winnipeg
Water and Waste Department

2023 RIVERS MONITORING

Survey Date: September 14, 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		602737	602739	602736	602738	602740	602746	602741	602744	602745	602743	602742
Temperature	°C	16.3	16.3	15.6	16.8	18.1	18.2	18.5	18.2	17.9	18.2	18.2
pH	units	8.58	8.60	8.57	8.60	8.44	8.43	8.49	8.45	8.50	8.26	8.36
Dissolved Oxygen	mg/L	9.2	9.1	9.1	8.9	8.6	8.5	8.6	8.3	8.2	7.7	8.9
Oxygen Saturation	%	93	92	91	91	91	90	90	87	86	81	93
Biochemical Oxygen Demand	mg/L	3	3	3	<3	<3	<3	<3	<3	<3	<3	<3
Total Solids	mg/L	828	824	832	842	668	674	656	646	720	738	714
Total Suspended Solids	mg/L	35	32	36	37	45	46	39	22	23	26	6
Turbidity	n.t.u.	26	30	26	27	35	39	34	17	19	21	8
Chlorophyll a	ug/L	18.7	18.0	20.0	15.4	6.7	8.0	9.3	2.7	4.7	4.7	6.7
Total Organic Carbon	mg/L	9.4	9.2	9.3	9.6	9.2	9.9	9.2	9.5	9.2	9.7	9.4
Total Nitrogen	mg/L N	0.5	0.5	0.7	0.8	0.9	0.9	0.8	1.0	1.0	2.0	1.7
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.012	0.006	0.017	0.038	0.041	1.070	0.760
Nitrate Nitrogen	mg/L N	0.012	0.011	0.009	0.012	0.321	0.253	0.434	0.484	0.351	0.460	0.446
Soluble Phosphorus	mg/L P	0.31	0.04	0.04	0.04	0.12	0.12	0.14	0.10	0.08	0.21	0.18
Total Phosphorus	mg/L P	0.50	0.18	0.19	0.18	0.22	0.20	0.19	0.19	0.19	0.32	0.27
Escherichia coli	MPN/100 mL	290	310	440	120	120	70	40	30	60	80	150
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 West (SW)
 Wind Speed: 12 km/h
 Cloud Coverage: 90 %
 Precipitation: <0.1 mm
 Air Temperature: 14 °C

Report Date:

December 6, 2023