



City of Winnipeg  
Water and Waste Department

2023 RIVERS MONITORING

Survey Date: October 26, 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		613140	613142	613139	613141	613143	613149	613144	613147	613148	613146	613145
Temperature	°C	5.3	5.5	5.2	5.7	7.5	6.9	7.2	8.0	7.7	8.4	8.6
pH	units	8.50	8.55	8.52	8.50	8.48	8.42	8.41	8.37	8.42	8.40	8.28
Dissolved Oxygen	mg/L	12.0	12.0	11.9	11.5	11.0	11.0	10.7	10.3	10.7	10.1	11.3
Oxygen Saturation	%	94	95	93	91	90	89	88	86	88	85	95
Biochemical Oxygen Demand	mg/L	5	5	5	4	<3	<3	<3	<3	<3	<3	4
Total Solids	mg/L	754	784	784	774	746	780	762	754	752	772	752
Total Suspended Solids	mg/L	38	39	34	43	35	37	34	19	18	17	13
Turbidity	n.t.u.	25	28	23	26	30	35	30	19	16	15	11
Chlorophyll a	ug/L	30.0	32.0	27.4	28.7	7.3	6.0	4.0	<1.0	8.7	8.7	3.3
Total Organic Carbon	mg/L	9.8	10.1	10.0	9.9	11.3	11.8	9.6	11.0	10.8	11.2	10.9
Total Nitrogen	mg/L N	0.8	0.8	0.9	0.8	1.0	1.1	1.3	1.7	1.1	2.1	2.4
Ammonia Nitrogen	mg/L N	<0.003	<0.003	0.011	0.028	0.044	0.056	0.057	0.065	0.056	0.942	0.545
Nitrate Nitrogen	mg/L N	0.155	0.134	0.136	0.112	0.302	0.373	0.725	0.639	0.430	0.520	0.608
Soluble Phosphorus	mg/L P	0.23	0.08	0.08	0.08	0.13	0.14	0.17	0.18	0.16	0.24	0.22
Total Phosphorus	mg/L P	0.31	0.16	0.22	0.19	0.17	0.21	0.21	0.20	0.18	0.33	0.25
Escherichia coli	MPN/100 mL	100	190	230	500	130	80	<10	100	80	110	50
Fecal Coliform	MPN/100 mL	40	100	280	420	160	80	<10	50	110	90	120

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

Weather conditions during monitoring:

Wind Direction: North (N)  
 Wind Speed: 12 km/h  
 Cloud Coverage: 100 %  
 Precipitation: 1.8 mm  
 Air Temperature: -1 °C

Report Date:

December 6, 2023