



City of Winnipeg  
Water and Waste Department

2023 RIVERS MONITORING

Survey Date: September 28, 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		606321	606323	606320	606322	606324	606330	606325	606328	606329	606327	606326
Temperature	° C	17.3	17.5	17.2	17.8	17.9	17.8	17.8	17.3	17.5	17.6	17.3
pH	units	8.65	8.75	8.66	8.76	8.20	8.50	8.43	8.53	8.51	8.30	8.27
Dissolved Oxygen	mg/L	9.8	9.7	9.2	9.1	8.6	8.5	8.4	8.2	8.1	8.1	9.3
Oxygen Saturation	%	101	100	95	95	90	89	87	85	84	92	96
Biochemical Oxygen Demand	mg/L	4	3	4	3	<3	<3	<3	<3	<3	<3	<3
Total Solids	mg/L	814	832	810	808	798	800	786	752	794	754	738
Total Suspended Solids	mg/L	47	48	41	38	34	43	36	17	21	14	12
Turbidity	n.t.u.	27	31	29	28	29	32	34	18	19	15	9
Chlorophyll a	ug/L	66.8	47.4	44.7	34.0	nr	4.0	2.7	2.7	8.7	6.0	3.3
Total Organic Carbon	mg/L	10.5	10.9	10.3	10.2	12.1	10.8	12.0	10.7	10.6	10.4	9.9
Total Nitrogen	mg/L N	0.9	0.9	0.8	0.9	1.5	1.0	1.2	0.9	0.8	1.9	1.6
Ammonia Nitrogen	mg/L N	0.069	0.065	0.071	0.071	0.085	0.112	0.100	0.122	0.103	0.867	0.765
Nitrate Nitrogen	mg/L N	<0.003	<0.003	<0.003	<0.003	0.553	0.477	0.598	0.400	0.284	0.366	0.385
Soluble Phosphorus	mg/L P	0.25	0.08	0.07	0.06	0.19	nr	0.17	0.17	0.14	0.26	nr
Total Phosphorus	mg/L P	0.33	0.20	0.20	0.17	0.21	0.20	0.21	0.17	0.16	0.25	0.22
Escherichia coli	MPN/100 mL	560	1,310	910	550	200	240	170	10	110	100	130
Fecal Coliform	MPN/100 mL	560	1,010	990	600	240	190	120	20	110	90	140

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

Weather conditions during monitoring:

Wind Direction: South (S)  
Wind Speed: 40 km/h  
Cloud Coverage: 100 %  
Precipitation: <0.1 mm  
Air Temperature: 19 °C

Report Date:

December 6, 2023