

2023 - 2024 RIVER MONITORING REPORT

Parameter	Unit	Assiniboine River Sampling Locations			Red River Sampling Locations						
		Headingley Bridge	Assiniboine Park Bridge	Osborne Street Bridge	St. Adolphe Pierre Delorme Bridge	Fort Garry Bridge	Queen Elizabeth Way Bridge	Provencher Bridge	Harry Lazarenko Bridge	North Perimeter Bridge	St. Andrew's Lock and Dam Bridge
		R1	R3	RX1	R5	R7	R8	RX2	R9	R10	R11
Temperature ^{1,2}	° C	17.2	15.5	18.2	16.0	16.9	16.5	17.0	14.5	16.3	15.6
Dissolved Oxygen ^{1,2}	mg/L	7.13	7.94	6.63	8.16	8.52	7.64	8.86	9.35	8.55	9.52
pH ^{1,2}	units	7.21	7.80	5.02	8.64	8.65	8.59	8.60	8.65	8.53	8.49
Ammonia ³	mg/L N	<0.013	<0.013	<0.013	0.031	<0.013	0.036	0.022	0.022	1.20	ND
Biochemical Oxygen Demand ³	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	ND
Total Suspended Solids ³	mg/L	40.0	35.7	60.0	19.7	34.8	16.3	17.1	22.0	26.4	ND
Total Kjeldahl Nitrogen ⁵	mg/L	0.24	0.21	0.23	0.11	0.23	0.66	0.13	0.22	1.46	ND
Total Nitrogen ³	mg/L N	0.24	0.22	0.23	0.35	0.58	1.10	0.53	0.46	1.69	ND
Total Phosphorus ³	mg/L P	0.162	0.145	0.154	0.190	0.192	0.173	0.181	0.150	0.300	ND
Escherichia Coliform ^{2,4}	MPN/100 mL	150	300	190	67	50	13	45	223	213	80
Survey Date: September 11, 2023	Time:	11:11 AM	9:49 AM	12:58 PM	10:50 AM	11:40 AM	12:09 PM	1:02 PM	1:43 PM	2:16 PM	2:45 PM

Notes:

CSO = Combined Sewer Overflow

MPN = Most Probable Number

ND = No Data

- 1) Field analysed parameter
- 2) Average value of discrete samples reported
- 3) Value of composited sample reported
- 4) Analysed by contract laboratory
- 5) Calculated by laboratory

< VALUE Less than minimum detection
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		R1	R3	RX1	R5	R7	R8	RX2	R9	R10	R11
Temperature ^{1,2}	° C	13.9	15.4	16.3	11.3	13.0	17.2	17.4	17.3	17.0	19.3
Dissolved Oxygen ^{1,2}	mg/L	7.43	6.82	6.77	11.02	8.58	6.60	6.51	6.83	7.23	6.08
pH ^{1,2}	units	8.29	8.30	8.43	8.82	8.65	8.62	8.62	8.54	8.40	8.33
Ammonia ³	mg/L N	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	1.06	ND
Biochemical Oxygen Demand ³	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	ND
Total Suspended Solids ³	mg/L	47.0	31.2	36.4	24.3	32.8	15.8	17.2	20.3	19.0	ND
Total Kjeldahl Nitrogen ⁵	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND
Total Nitrogen ³	mg/L N	0.41	0.50	0.46	0.63	0.74	0.68	0.68	0.61	1.95	ND
Total Phosphorus ³	mg/L P	0.166	0.175	0.169	0.204	0.192	0.192	0.192	0.178	0.327	ND
Escherichia Coliform ^{2,4}	MPN/100 mL	160	393	263	70	23	20	60	103	103	80
Survey Date: September 12, 2023	Time:	10:00 AM	12:10 PM	1:45 PM	9:06 AM	9:54 AM	10:44 AM	11:25 AM	11:55 AM	12:33 PM	1:35 PM

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		R1	R3	RX1	R5	R7	R8	RX2	R9	R10	R11
Temperature ^{1,2}	° C	12.5	12.8	19.2	12.9	15.6	14.9	16.3	17.5	18.0	19.1
Dissolved Oxygen ^{1,2}	mg/L	8.80	8.99	5.36	7.98	6.88	7.10	6.25	6.08	5.14	5.89
pH ^{1,2}	units	8.33	8.30	8.19	8.70	8.68	8.67	8.68	8.67	8.46	8.46
Ammonia ³	mg/L N	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0.98	ND
Biochemical Oxygen Demand ³	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	ND
Total Suspended Solids ³	mg/L	34.8	34.0	29.2	18.6	33.1	17.2	20.0	20.0	27.2	ND
Total Kjeldahl Nitrogen ⁵	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND
Total Nitrogen ³	mg/L N	0.42	0.33	0.43	0.67	0.73	0.77	0.77	0.63	1.81	ND
Total Phosphorus ³	mg/L P	0.192	0.161	0.177	0.165	0.217	0.184	0.199	0.171	0.321	ND
Escherichia Coliform ^{2,4}	MPN/100 mL	103	303	137	83	33	40	63	87	87	180
Survey Date: September 13, 2023	Time:	9:47 AM	10:40 AM	12:40 PM	9:20 AM	10:33 AM	11:23 AM	11:45 AM	1:11 PM	1:58 PM	2:31 PM

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