

**City of Winnipeg
Water and Waste Department**

2012 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 17, 2012		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE	WEST PERIMETER BRIDGE ⁴	ASSINIBOINE PARK FOOT BRIDGE	MAIN STREET BRIDGE	SOUTH FLOODWAY CONTROL ⁵	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE ⁶	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	°C	9.0	9.0	9.0	8.3	NS	7.6	8.1	7.9	8.3	8.2	8.3
Dissolved Oxygen	mg/L	12.1	12.2	12.3	12.4	NS	15.0	14.9	15.3	13.3	12.9	13.3
Oxygen Saturation ²	%	105	106	106	106	NS	125	126	129	113	109	113
pH	units	8.52	8.51	8.51	8.51	NS	8.87	8.58	8.87	8.66	8.56	8.46
Total Solids	mg/L	1040	1020	1030	1040	NS	1100	1110	1120	986	934	882
Total Suspended Solids	mg/L	195	192	227	222	NS	30	19	17	51	32	17
Turbidity	n.t.u.	133	119	122	125	NS	24	20	13	39	26	16
Total Organic Carbon	mg/L	16	17	15	17	NS	13	16	14	17	16	15
Chlorophyll a	ug/L	14	14	16	14	NS	55	63	75	39	35	18
Ammonia Nitrogen	mg/L N	0.012	NR	0.028	0.041	NS	0.019	0.540	1.460	0.175	0.684	0.519
Nitrate Nitrogen	mg/L N	0.353	NR	0.369	0.378	NS	0.172	0.181	0.141	0.318	0.495	0.524
Total Kjeldahl Nitrogen	mg/L N	<2.0	NR	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	NR	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.13	NR	0.12	0.13	NS	0.20	0.18	0.21	0.16	0.18	0.16
Total Phosphorus	mg/L P	0.40	0.40	0.30	0.40	NS	<0.30	0.40	0.40	<0.30	<0.30	<0.30
Escherichia Coliform ³	colonies/100 mL	15	93	23	930	NS	4	NS	23	930	230	150
Fecal Coliform ³	colonies/100 mL	15	230	23	930	NS	23	NS	23	930	230	430

Weather Conditions during monitoring: Winds SE at 9 km/hr with 100% cloud cover. Average air temperature during survey at 12.0°C.

- Notes:
- 1) LIMS Reference No: 34152
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) There were no ammonia, nitrogen or ortho phosphorus samples received from the West Perimeter sampling location due to lab prep error
 - 5) Red River elevation at South Floodway Control Gates 738.6 ft.
 - 6) There was no bacti sample submitted to the contract lab for the Fort Garry sampling location due to sample prep error
 - 7) There was no sample for the South Floodway Control location due to construction.

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