

City of Winnipeg
Water and Waste Department

2009 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : September 25, 2009		Assiniboine River Sampling Locations				Red River Sampling Locations					
Parameter	Unit	ASSINIBOINE PARK FOOT BRIDGE	HEADINGLY BRIDGE	MAIN STREET BRIDGE	WEST PERIMETER BRIDGE	SOUTH FLOODWAY CONTROL ⁴	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	19.3	18.9	18.0	NS	NS	19.0	18.8	18.6	18.3	18.5
Dissolved Oxygen	mg/L	8.7	8.9	8.5	NS	NS	9.2	9.4	9.4	9.1	9.1
Oxygen Saturation ²	%	95	96	90	NS	NS	100	102	101	97	98
pH	units	8.57	8.58	8.49	NS	NS	8.55	8.60	8.57	8.43	8.28
Total Solids	mg/L	644	660	580	NS	NS	424	460	488	500	460
Total Suspended Solids	mg/L	136	156	77	NS	NS	27	40	44	39	32
Turbidity	n.t.u.	134	151	89	NS	NS	40	47	52	44	35
Total Organic Carbon	mg/L	9	8	11	NS	NS	11	11	10	10	11
Chlorophyll a	ug/L	47	49	44	NS	NS	39	63	58	49	35
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	NS	NS	0.146	<0.003	<0.003	0.181	0.060
Nitrate Nitrogen	mg/L N	0.230	0.209	0.171	NS	NS	0.037	0.047	0.124	0.312	0.531
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.14	0.13	0.14	NS	NS	0.16	0.13	0.14	0.23	0.23
Total Phosphorus	mg/L P	0.40	0.40	<0.30	NS	NS	<0.30	<0.30	<0.30	<0.30	<0.30
Escherichia Coliform ³	colonies/100 mL	1300	330	1400	NS	NS	2400	230	310	490	49
Fecal Coliform ³	colonies/100 mL	1300	330	1400	NS	NS	2400	230	460	790	130

Weather Conditions during monitoring: Winds SSW at 18 km/hr with 0% cloud cover. Average air temperature during survey at 18 C

- Notes:
- 1) LIMS Reference No: 24194
 - 2) Calculated values
 - 3) Analyzed by contract laboratory.
 - 4) Red River elevation at South Floodway Control Gates: 734.3 ft
 - 5) There is no sample at the West Perimeter Bridge and the South Floodway Control Gates due to construction.

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