

**City of Winnipeg  
Water and Waste Department**

**2010 RIVERS SURVEY MONITORING REPORT**

Survey Date <sup>1</sup> : September 15, 2010		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 <sup>4</sup>	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	° C	15.3	15.2	14.7	NS	NS	15.6	15.3	15.0	15.0	15.3
Dissolved Oxygen	mg/L	9.5	9.5	9.5	NS	NS	9.0	8.9	9.0	9.1	10.0
Oxygen Saturation <sup>2</sup>	%	95	95	94	NS	NS	91	89	90	91	100
pH	units	9.86	9.70	8.40	NS	NS	8.21	8.21	8.31	8.07	8.09
Total Solids	mg/L	956	844	868	NS	NS	732	728	752	736	736
Total Suspended Solids	mg/L	158	150	198	NS	NS	298	187	228	228	236
Turbidity	n.t.u.	71.7	69.9	61.2	NS	NS	157	149	130	134	125
Total Organic Carbon	mg/L	17	18	19	NS	NS	13	14	15	14	14
Chlorophyll a	ug/L	11	16	16	NS	NS	19	21	11	18	23
Ammonia Nitrogen	mg/L N	<0.003	<0.003	<0.003	NS	NS	<0.003	<0.003	<0.003	0.018	0.027
Nitrate Nitrogen	mg/L N	0.402	0.391	0.380	NS	NS	0.305	0.280	0.313	0.363	0.387
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 <sup>2</sup>	mg/L N	<2.0	<2.0	<2.0	NS	NS	2.3	<2.0	<2.0	2.4	<2.0
Soluble Phosphorus	mg/L P	0.23	0.21	0.23	NS	NS	0.26	0.27	0.27	0.29	0.30
Total Phosphorus	mg/L P	0.50	<0.30	0.50	NS	NS	0.70	0.60	0.60	0.60	0.70
Escherichia Coliform <sup>3</sup>	colonies/100 mL	93	230	93	NS	NS	290	430	430	430	1200
Fecal Coliform <sup>3</sup>	colonies/100 mL	93	230	150	NS	NS	290	430	430	430	1200

Weather Conditions during monitoring: Winds N at 4 km/hr with 60% cloud cover. Average air temperature during survey at 8°C

- Notes:
- 1) LIMS Reference No: 27392
  - 2) Calculated values
  - 3) Analyzed by contract laboratory.
  - 4) Red River elevation at South Floodway Control Gates: 736.0 ft
  - 5) There are no samples at the West Perimeter Bridge or the South Floodway Control Gates due to construction.

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Supervisor of Analytical Services

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