

**City of Winnipeg
Water and Waste Department**

2013 RIVERS SURVEY MONITORING REPORT

Survey Date ¹ : October 16, 2013		Assiniboine River Sampling Locations				Red River Sampling Locations						
Parameter	Unit	HEADINGLY BRIDGE	WEST PERIMETER BRIDGE	ASSINIBOINE PARK FOOT BRIDGE	MAIN STREET BRIDGE	SOUTH FLOODWAY CONTROL ⁴	SOUTH PERIMETER BRIDGE	FORT GARRY BRIDGE	NORWOOD BRIDGE	REDWOOD BRIDGE	NORTH PERIMETER BRIDGE	LOCKPORT BRIDGE
Temperature	°C	8.7	9.2	8.8	8.2	10.4	10.7	11.0	10.5	9.8	9.6	10.2
Dissolved Oxygen	mg/L	10.5	10.5	10.5	10.3	9.9	10.0	10.1	9.8	9.9	9.8	10.3
Oxygen Saturation ²	%	90	91	90	87	89	90	92	88	88	86	92
pH	units	8.70	8.66	8.68	8.69	8.67	8.70	8.68	8.62	8.58	8.46	8.06
Total Solids	mg/L	964	974	956	978	916	962	908	908	902	892	890
Total Suspended Solids	mg/L	143	137	123	120	78	45	40	28	39	22	19
Turbidity	n.t.u.	75	73	65	69	66	41	35	29	30	24	19
Total Organic Carbon	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorophyll a	ug/L	28	2	26	21	16	18	21	16	18	16	14
Ammonia Nitrogen	mg/L N	<0.003	0.044	<0.003	<0.003	<0.003	<0.003	<0.003	0.257	0.077	0.321	0.416
Nitrate Nitrogen	mg/L N	0.209	0.228	0.236	0.171	0.504	0.424	0.476	0.433	0.383	0.463	0.556
Total Kjeldahl Nitrogen	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Nitrogen ²	mg/L N	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Soluble Phosphorus	mg/L P	0.14	0.14	0.14	0.12	0.17	0.17	0.19	0.20	0.17	0.21	0.41
Total Phosphorus	mg/L P	0.40	0.30	0.40	0.30	0.30	0.90	0.30	0.30	0.30	0.30	0.30
Escherichia Coliform ³	MPN/100 mL	150	230	930	93	230	93	430	43	43	230	230
Fecal Coliform ³	MPN/100 mL	430	230	930	93	230	93	430	93	93	230	230

Weather Conditions during monitoring: Winds WNW at 13 km/hr with 50% cloud cover and no precipitation. Average air temperature during survey at 1°C

Notes: 1) LIMS Reference No: 37373
 2) Calculated values
 3) Analyzed by contract laboratory.
 4) Red River elevation at South Floodway Control Gates 733.4
 5) Pierre Delorme Bridge was used as an alternate for the South Floodway Control due to construction.
 6) TOC not analysed for any locations due to sample holding time exceedence.
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