

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: June 7, 2015		Assiniboine Sampling Locations								
Parameter	Unit	HEADINGLEY BRIDGE			ASSINIBOINE PARK FOOT BRIDGE			OSBORNE STREET BRIDGE		
		(R1)			(R3)			(RX1)		
		A	B	C	A	B	C	A	B	C
Temperature	° C	18.2	18.5	18.3	18.8	18.7	18.6	18.5	18.5	18.4
Dissolved Oxygen	mg/L	6.96	6.67	6.5	7.05	6.59	6.9	7.3	7.05	6.72
Conductivity	mS/cm	1073	1085	1086	1082	1085	1087	1094	1093	1090
pH	units	8.6	8.58	8.47	8.34	8.57	8.48	8.5	8.55	8.51
Biochemical Oxygen Demand	mg/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbonaceous BOD	mg/L									
Total Suspended Solids	mg/L	127	130	150	137	156	148	141	159	174
Ammonia Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate Nitrogen	mg/L N	0.14	0.139	0.137	0.142	0.143	0.142	0.15	0.147	0.145
Nitrite Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.14	0.139	0.137	0.142	0.143	0.142	0.15	0.147	0.145
Total Kjeldahl Nitrogen	mg/L N	1.41	1.39	1.3	1.53	1.52	1.44	1.5	1.59	1.65
Total Nitrogen ¹	mg/L N	1.55	1.53	1.44	1.67	1.66	1.58	1.65	1.74	1.8
Total Phosphorus	mg/L P	0.193	0.186	0.207	0.22	0.215	0.216	0.208	0.216	0.212
Escherichia Coliform	MPN/100 mL	< 10000	< 10000	< 10000	< 10000	< 10000	< 10000	< 10000	< 10000	< 10000
Fecal Coliform	MPN/100 mL	*	< 10000	*	*	< 10000	*	*	< 10000	*
		10:15 AM	10:15 AM	10:15 AM	12:15 PM	12:15 PM	12:15 PM	1:00 PM	1:00 PM	1:00 PM

- Notes:
- 1) Calculated values
 - 2) * - Fecal coliform testing performed only at Sample B locations to compare with historical data. Not a requirement of Environment Act Licence No. 3042
 - 3) Analysed by contract laboratory

Client File No: 3205.00

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: June 8, 2015		Assiniboine Sampling Locations								
Parameter	Unit	HEADINGLEY BRIDGE			ASSINIBOINE PARK FOOT BRIDGE			OSBORNE STREET BRIDGE		
		(R1)			(R3)			(RX1)		
		A	B	C	A	B	C	A	B	C
Temperature	° C	19.3	19.3	19.2	19.3	19.4	19.4	19.4	19.4	19.4
Dissolved Oxygen	mg/L	7.8	7.44	7.42	7.61	7.33	7.92	7.37	7.28	7.34
Conductivity	mS/cm	1082	1085	1082	1085	1088	1084	1088	1087	1088
pH	units	8.6	8.52	8.56	8.56	8.54	8.57	8.55	8.56	8.56
Biochemical Oxygen Demand	mg/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Carbonaceous BOD	mg/L									
Total Suspended Solids	mg/L	108	125	130	113	121	122	123	123	133
Ammonia Nitrogen	mg/L N	0.017	0.02	0.02	0.014	0.017	0.013	0.035	0.018	0.016
Nitrate Nitrogen	mg/L N	0.195	0.194	0.194	0.193	0.193	0.193	0.204	0.197	0.196
Nitrite Nitrogen	mg/L N	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.195	0.194	0.194	0.193	0.193	0.193	0.204	0.197	0.196
Total Kjeldahl Nitrogen	mg/L N	0.93	1	1.01	0.88	0.86	1.25	0.88	0.9	0.88
Total Nitrogen ¹	mg/L N	1.12	1.19	1.2	1.08	1.05	1.44	1.09	1.1	1.08
Total Phosphorus	mg/L P	0.112	0.112	0.11	0.116	0.114	0.113	0.113	0.116	0.114
Escherichia Coliform	MPN/100 mL	< 100	< 100	< 100	< 100	< 100	< 100	100	100	200
Fecal Coliform	MPN/100 mL	*	< 100	*	*	< 100	*	*	< 100	*
		9:30 AM	9:30 AM	9:30 AM	10:30 AM	10:30 AM	10:30 AM	11:45 AM	11:45 AM	11:45 AM

- Notes:
- 1) Calculated values
 - 2) * - Fecal coliform testing performed only at Sample B locations to compare with historical data. Not a requirement of Environment Act Licence No. 3042
 - 3) Analysed by contract laboratory

Client File No: 3205.00

CSO INTERIM WATER QUALITY MONITORING

2015 ASSINIBOINE RIVER MONITORING REPORT

Survey Date: June 9, 2015		Assiniboine Sampling Locations								
Parameter	Unit	HEADINGLEY BRIDGE			ASSINIBOINE PARK FOOT BRIDGE			OSBORNE STREET BRIDGE		
		(R1)			(R3)			(RX1)		
		A	B	C	A	B	C	A	B	C
Temperature	° C	19.7	19.7	19.7	19.7	19.6	19.6	20	20	19.9
Dissolved Oxygen	mg/L	7.42	7.4	7.24	7.29	7.48	7.29	6.87	7.3	7.71
Conductivity	mS/cm	1090	1091	1090	1088	1091	1088	1092	1090	1088
pH	units	8.6	8.56	8.57	8.58	8.57	8.57	8.54	8.52	8.56
Biochemical Oxygen Demand	mg/L	< 2.0	< 2.0	< 3.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Carbonaceous BOD	mg/L									
Total Suspended Solids	mg/L	108	127	159	123	121	136	125	127	123
Ammonia Nitrogen	mg/L N	0.013	0.023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.016
Nitrate Nitrogen	mg/L N	0.219	0.236	0.217	0.234	0.228	0.238	0.236	0.254	0.251
Nitrite Nitrogen	mg/L N	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01
Nitrate-Nitrite Nitrogen	mg/L N	0.219	0.236	0.217	0.234	0.228	0.238	0.236	0.254	0.251
Total Kjeldahl Nitrogen	mg/L N	0.95	0.96	1.03	0.99	0.84	0.92	1.08	0.92	0.89
Total Nitrogen ¹	mg/L N	1.17	1.2	1.25	1.22	1.07	1.15	1.32	1.18	1.14
Total Phosphorus	mg/L P	0.113	0.113	0.114	0.111	0.114	0.112	0.11	0.11	0.113
Escherichia Coliform	MPN/100 mL	20	20	< 10	52	31	10	41	20	41
Fecal Coliform	MPN/100 mL	*	243	*	*	185	*	*	160	*
		9:30 AM	9:30 AM	9:30 AM	10:15 AM	10:15 AM	10:15 AM	11:30 AM	11:30 AM	11:30 AM

- Notes:
- 1) Calculated values
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