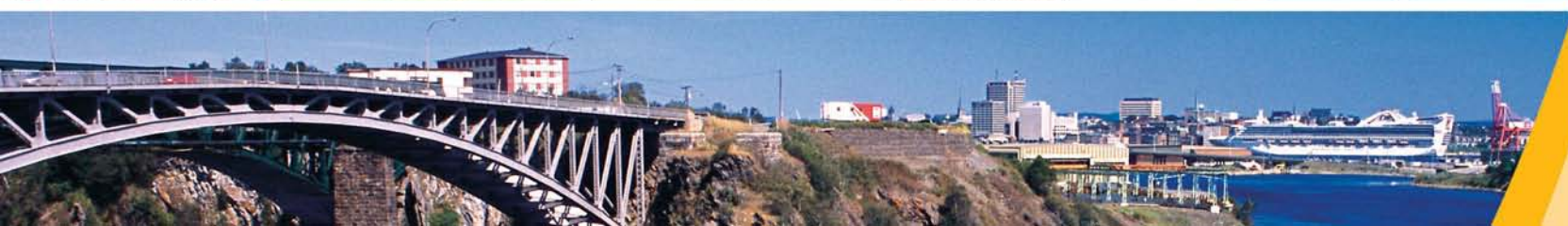




Air Quality Monitoring Results Supplementary Data 2011

Department of Environment
and Local Government



**New Brunswick Department of Environment and Local Government
Environmental Reporting Series
2013**

This report provides detailed, site-specific air quality information, and is provided as a companion document to the Department of Environment and Local Government's "Air Quality Monitoring Results 2011" report, which is available electronically via the DELG website:

www.gnb.ca/environment

Feedback

We are interested in your feedback on this report. All suggestions will be considered, and if possible, incorporated in future reports. You may contact the State of the Environment Branch, Department of Environment and Local Government (DELG) at (506) 457- 4844, by fax at (506) 453-2265 or by e-mail at darrell.welles@gnb.ca with any comments.

TABLE OF CONTENTS

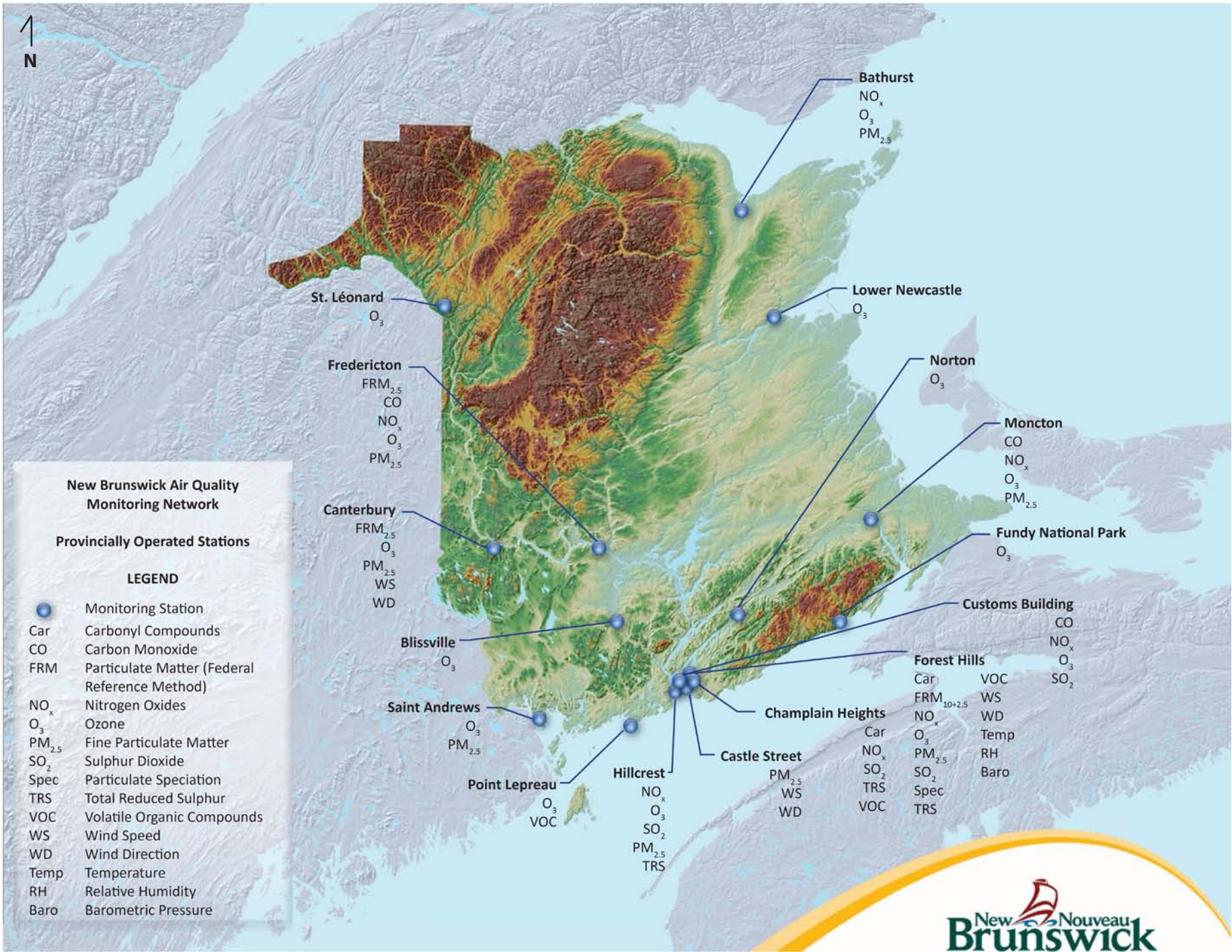
PART I: PROVINCIALY OPERATED AIR QUALITY MONITORING NETWORKS.....	1
Network Map - New Brunswick Air Quality Monitoring Network, Provincially Operated Stations.....	2
Continuous Air Quality Monitoring Results.....	3
Carbon Monoxide.....	3
Nitrogen Dioxide.....	4
Ozone.....	6
Fine Particulate Matter.....	10
Sulphur Dioxide.....	13
Total Reduced Sulphur.....	14
Volatile Organic Compounds, Saint John Region.....	15
Air Toxics.....	15
Ozone Depleting Substances.....	17
Smog-Forming VOCs.....	18
PART II: ACID PRECIPITATION MONITORING NETWORK.....	23
Network Map - New Brunswick Acid Precipitation Monitoring Network.....	24
Sulphate Deposition Trends.....	25
Network-wide Annual Mean Sulphate Concentration Trend.....	26
PART III: INDUSTRY-OPERATED AIR QUALITY MONITORING NETWORKS.....	27
Network Map - New Brunswick Air Quality Monitoring Network, Industry Operated Stations.....	28
Industry-Operated Monitoring Network Results.....	29
Xstrata, Belledune.....	29
NB Power, Belledune.....	31
NB Power, Dalhousie.....	35
NB Power, Millbank.....	38
NB Power, Coleson Cove.....	41
Irving Oil Ltd., Saint John.....	43
Irving Pulp and Paper, Saint John.....	46
Irving Pulp and Paper, Lake Utopia.....	47
Twin Rivers Paper Company, Edmundston.....	48
AV Nackawic, Nackawic.....	50
AV Cell, Atholville.....	51
PART IV: DETAILED STATION LOCATION MAPS.....	52
Saint John Region.....	53
Dalhousie and Belledune.....	54
Edmundston and Lower Newcastle.....	55

List of Acronyms and Abbreviations

CO	Carbon Monoxide
H ₂ S	Hydrogen Sulphide
ppb	Parts per billion
ppm	Parts per million
µg/m ³	Micrograms per cubic meter
NO ₂	Nitrogen Dioxide
O ₃	Ozone
PM _{2.5}	Fine Particulate Matter (less than 2.5 microns)
SO ₂	Sulphur Dioxide
TRS	Total Reduced Sulphur
TSP	Total Suspended Particulate
VOC	Volatile Organic Compound

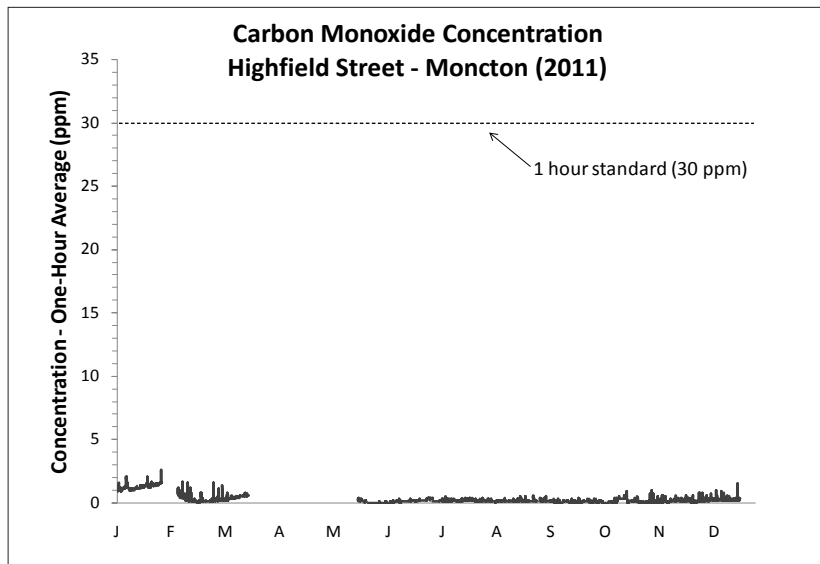
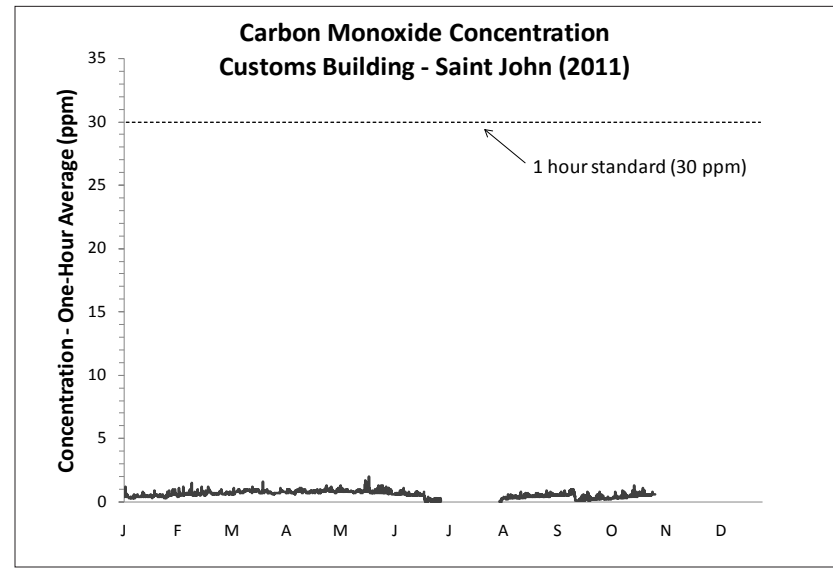
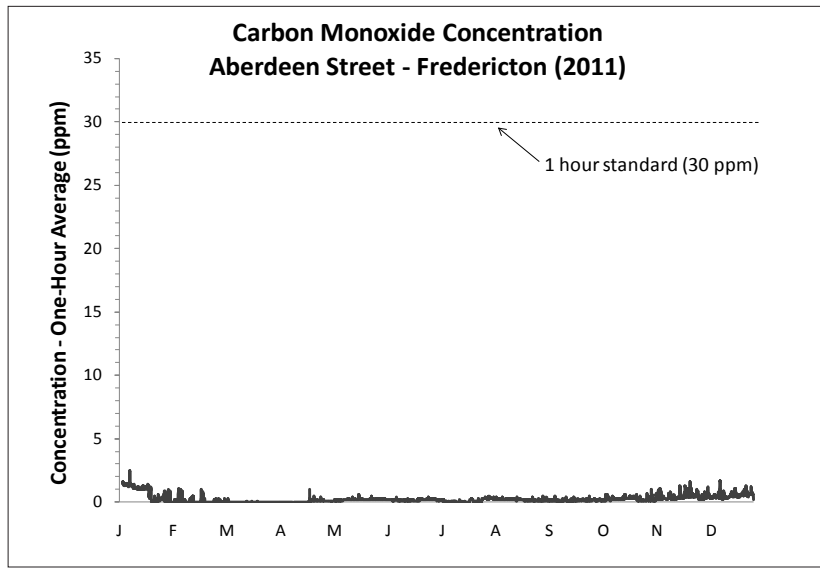
PART I:

PROVINCIALY OPERATED AIR QUALITY MONITORING NETWORKS



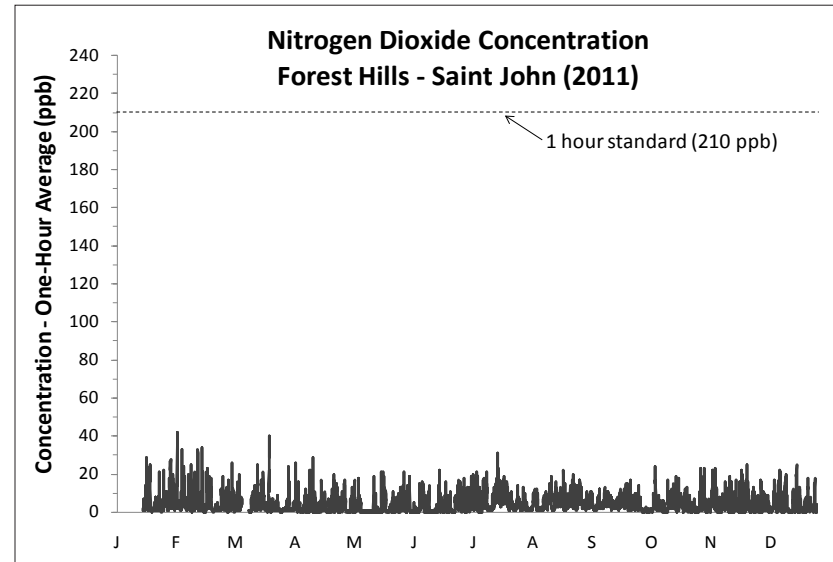
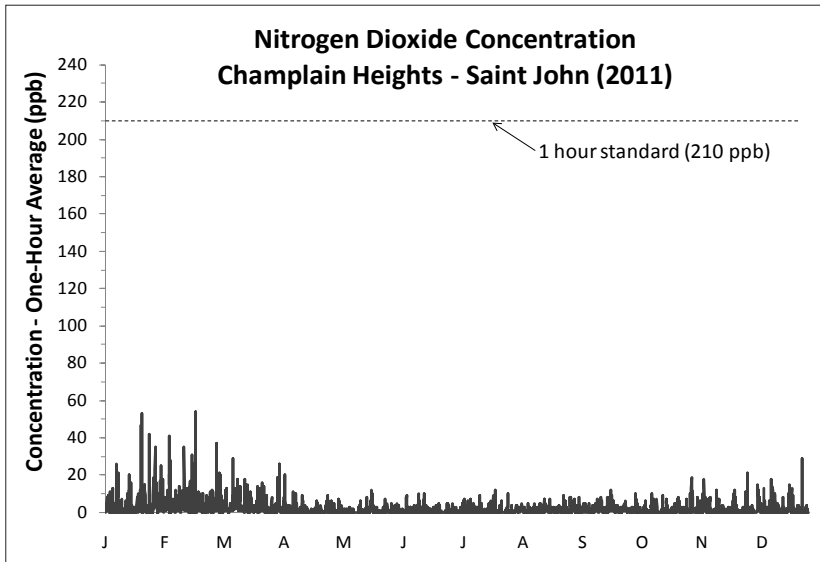
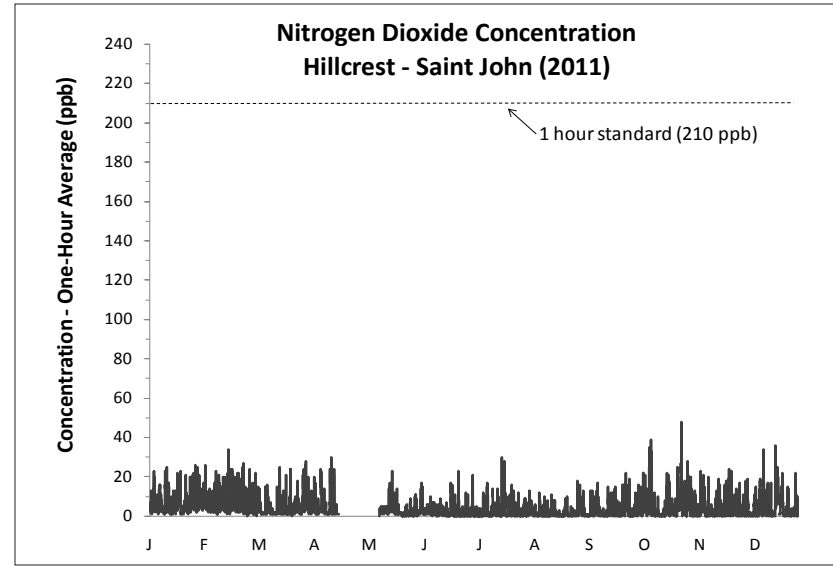
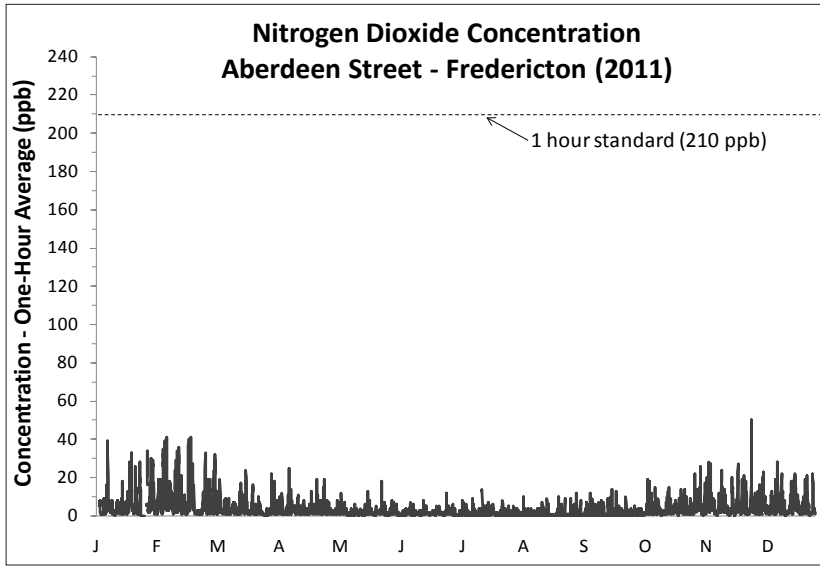
PART I: PROVINCIAL OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Carbon Monoxide



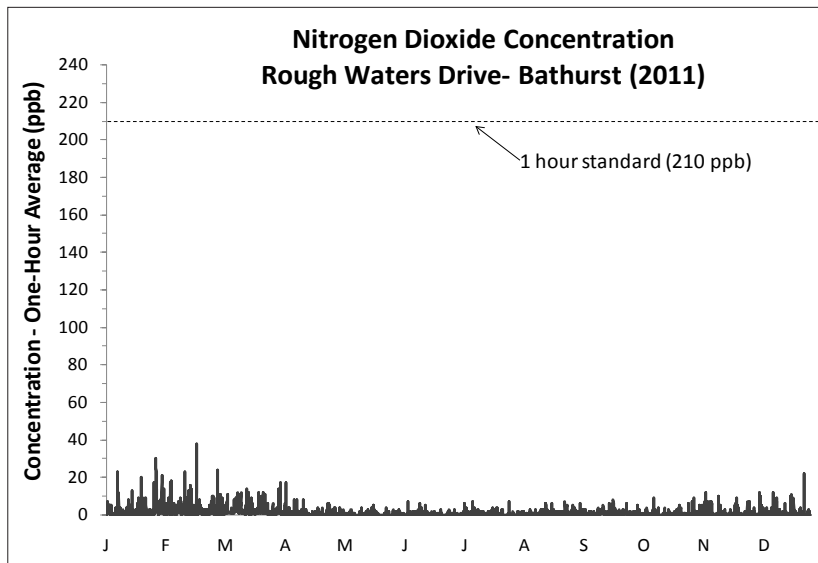
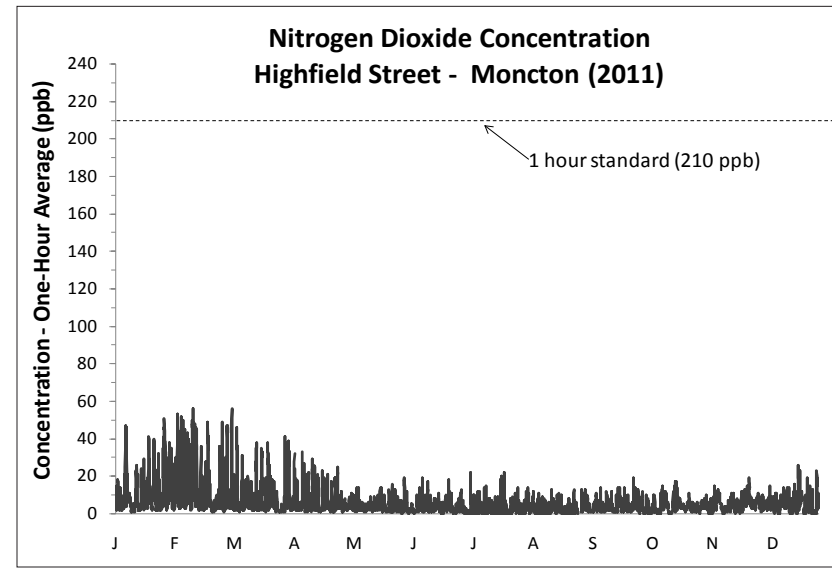
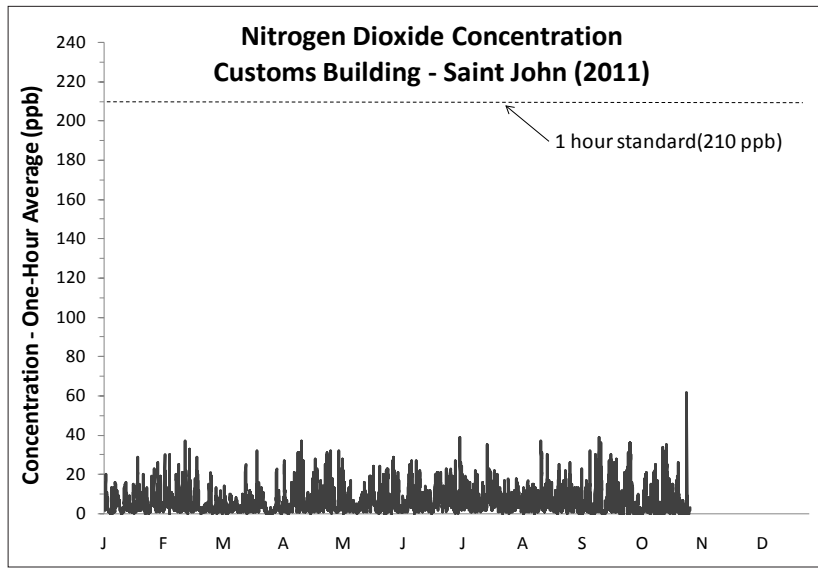
PART I: PROVINCIAL OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Nitrogen Dioxide



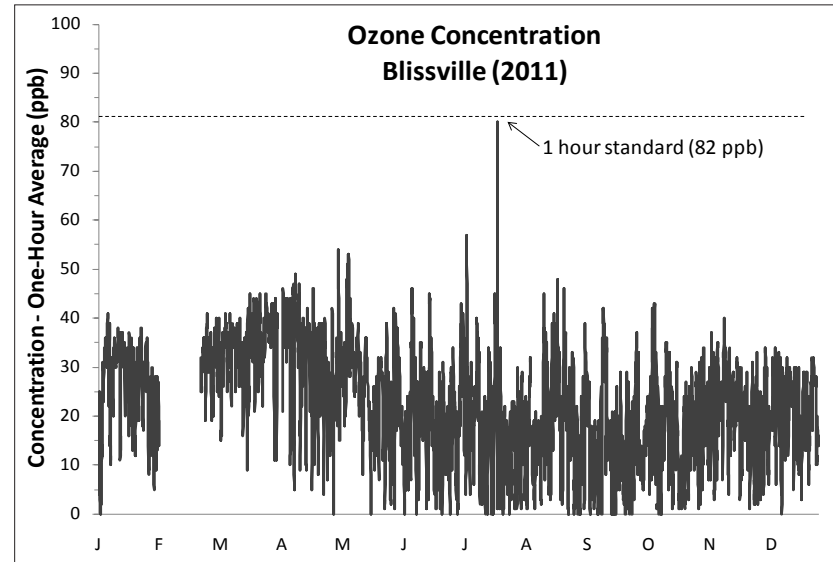
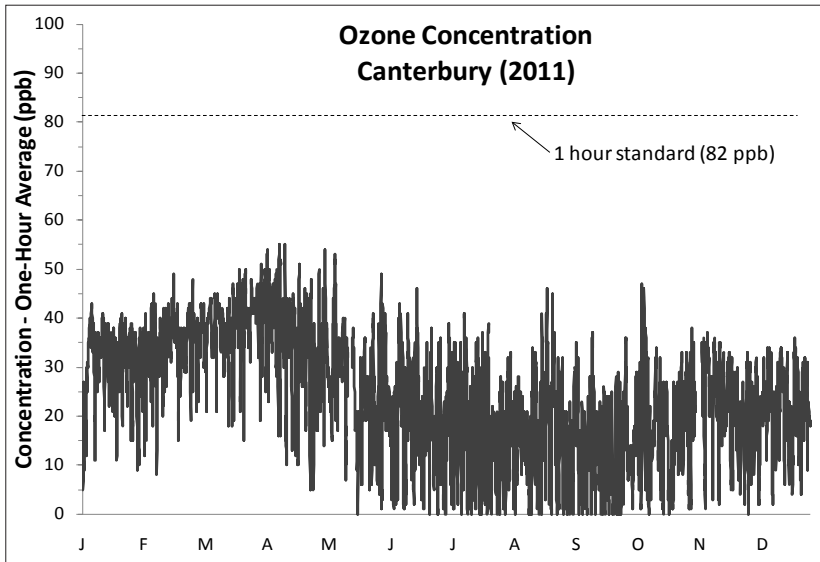
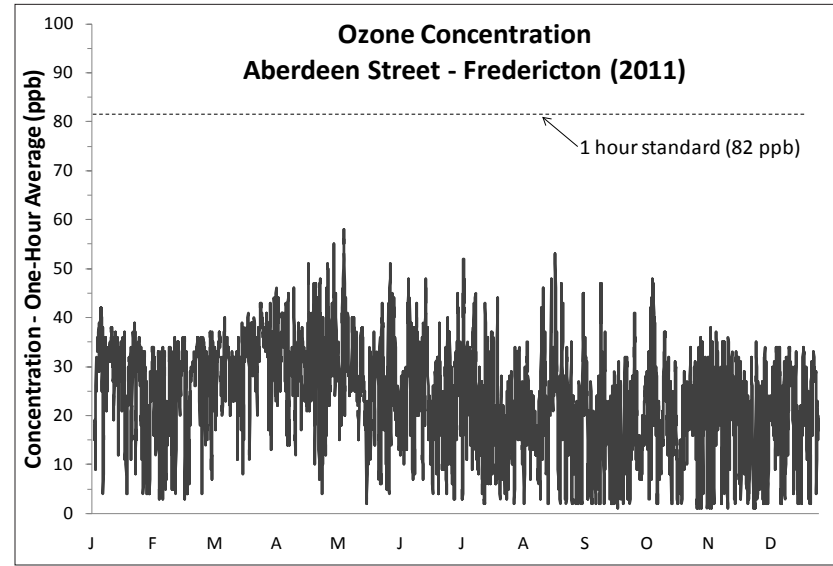
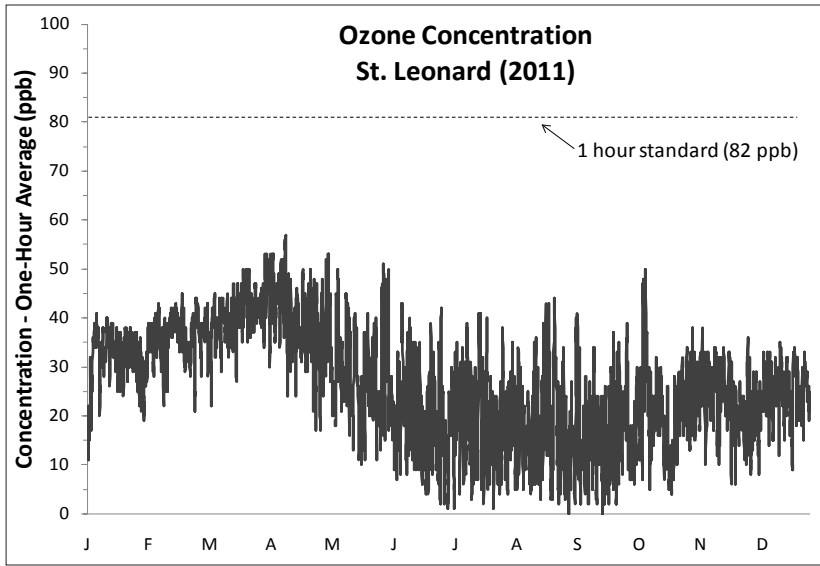
PART I: PROVINCIAL OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Nitrogen Dioxide



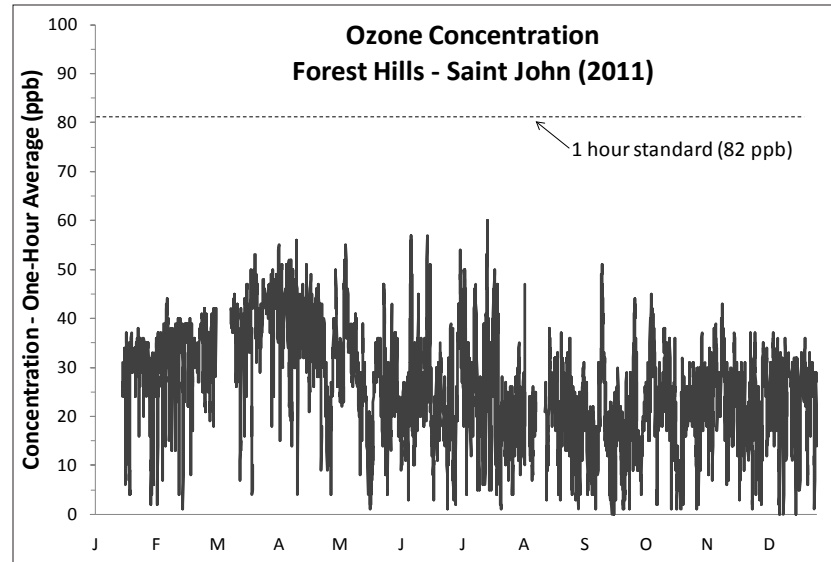
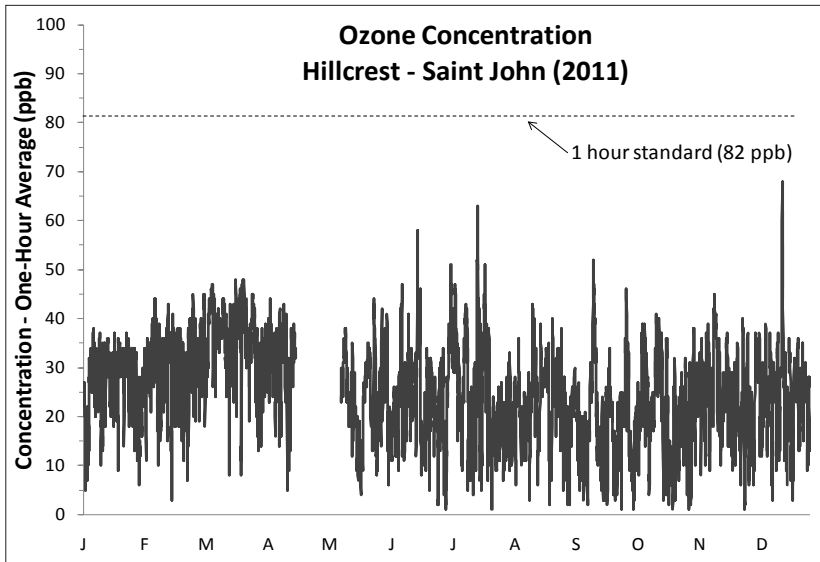
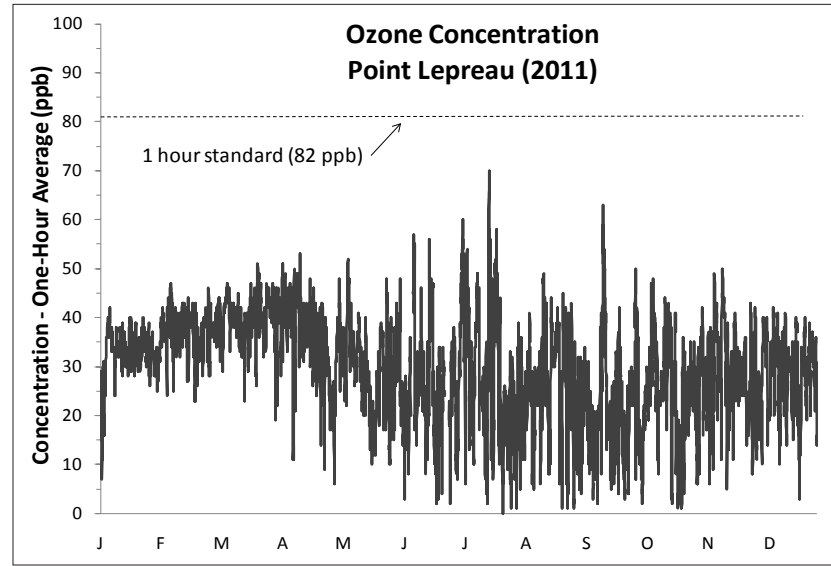
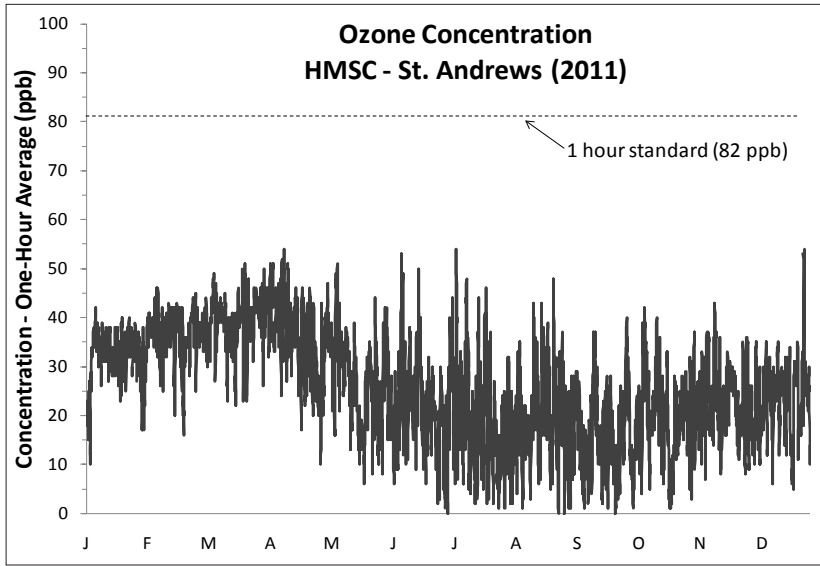
PART I: PROVINCIALY OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Ozone



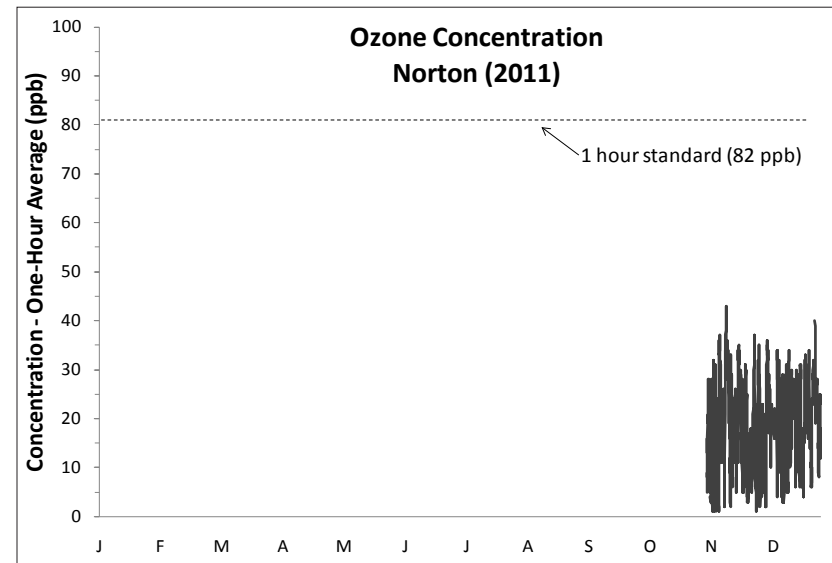
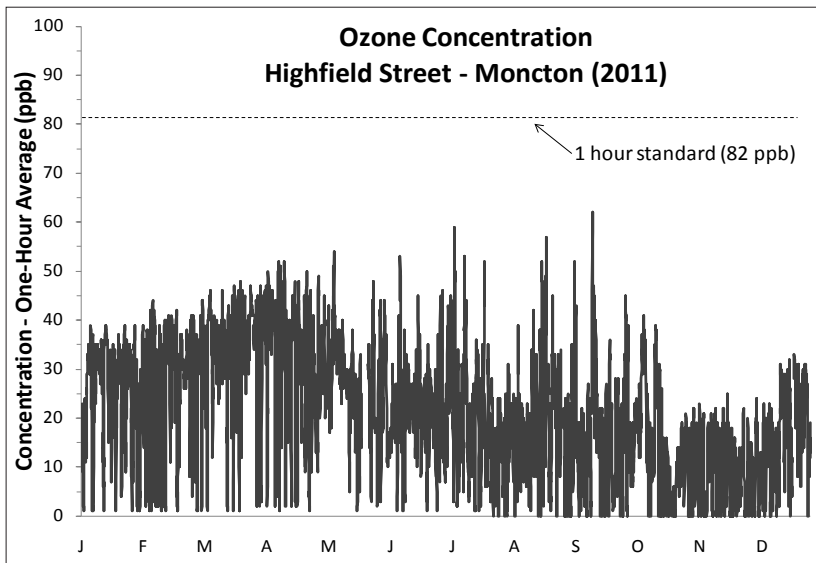
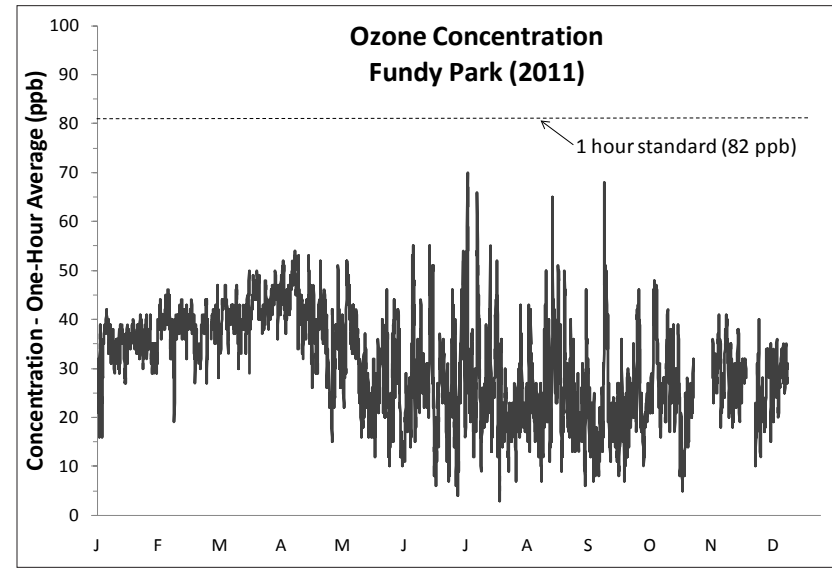
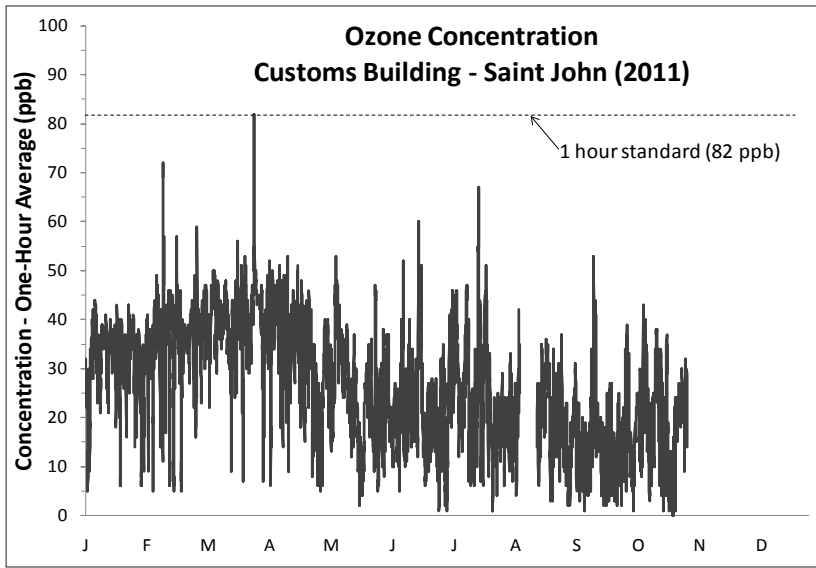
PART I: PROVINCIALY OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Ozone



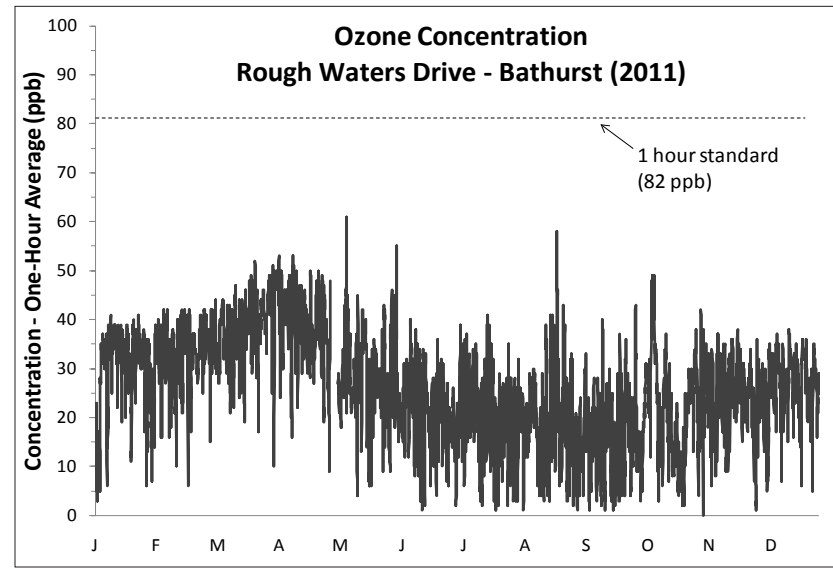
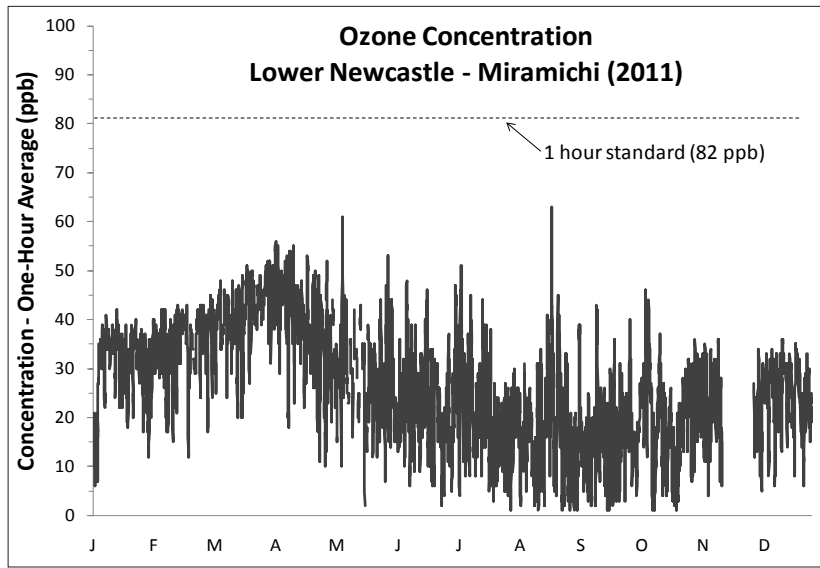
PART I: PROVINCIALLY OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Ozone



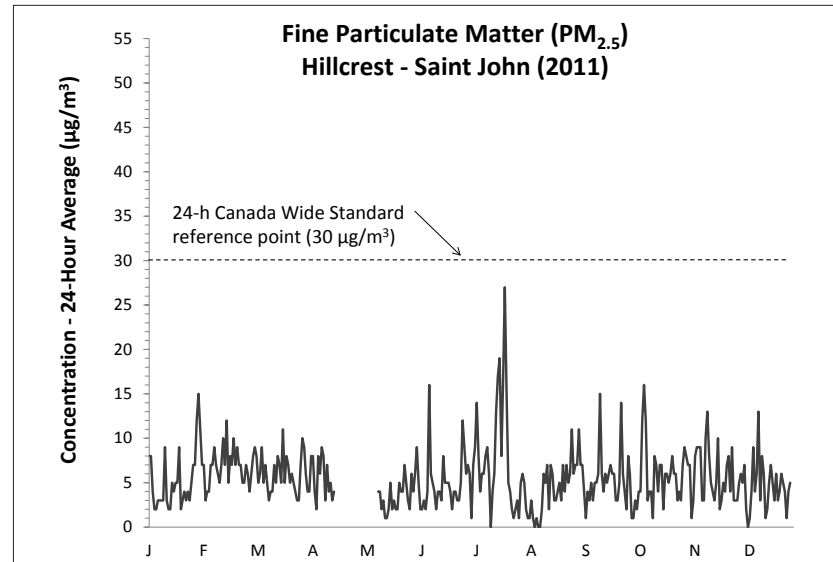
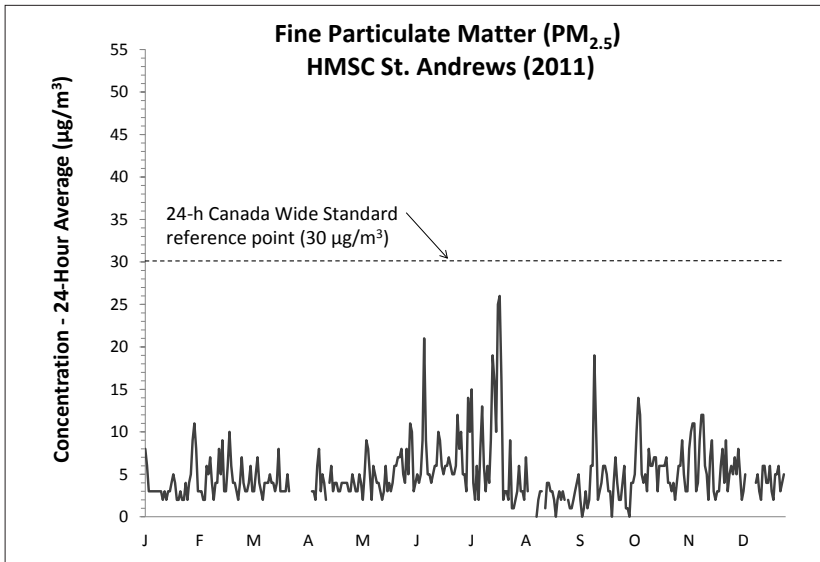
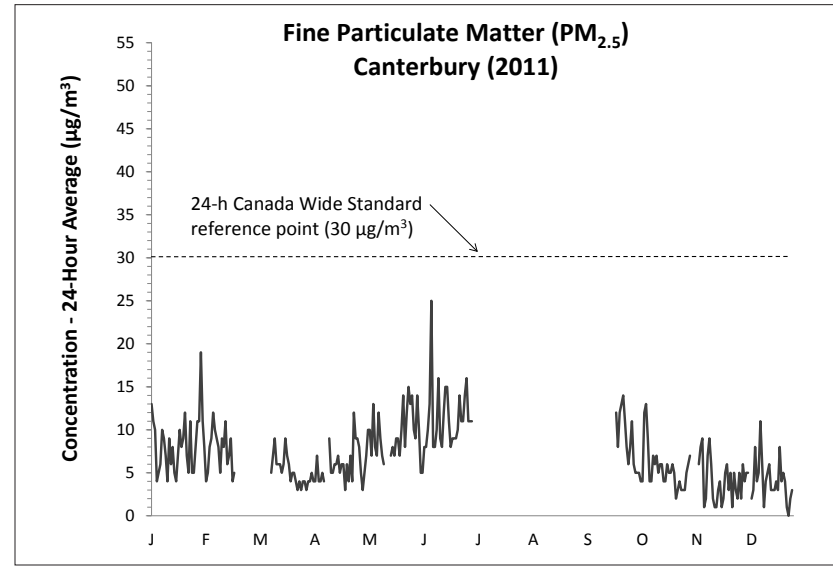
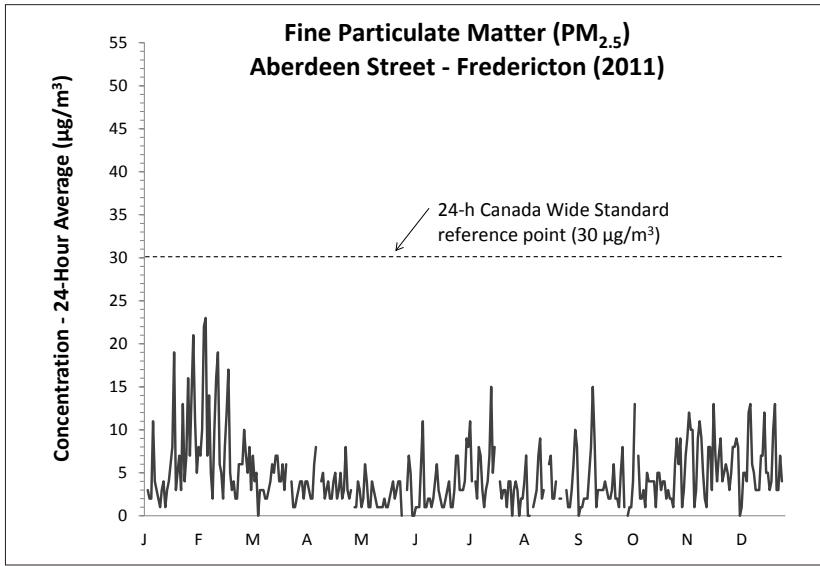
PART I: PROVINCIALY OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Ozone



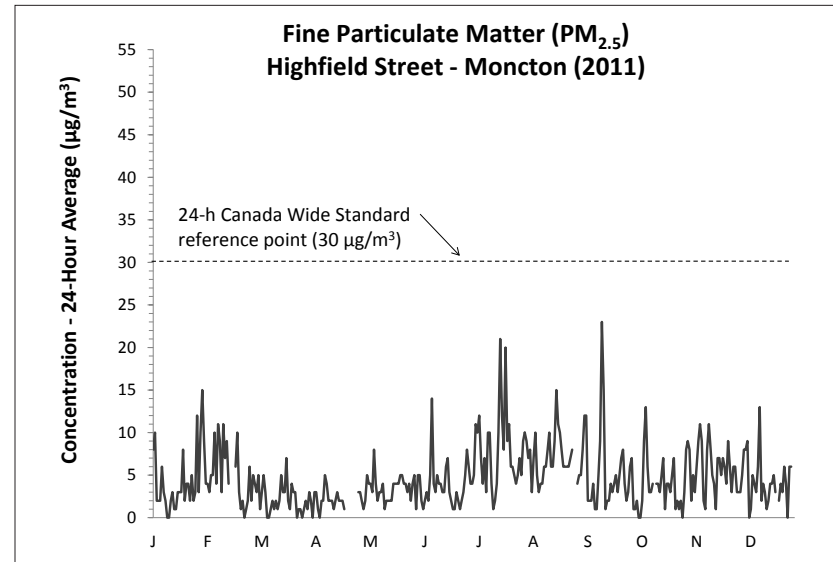
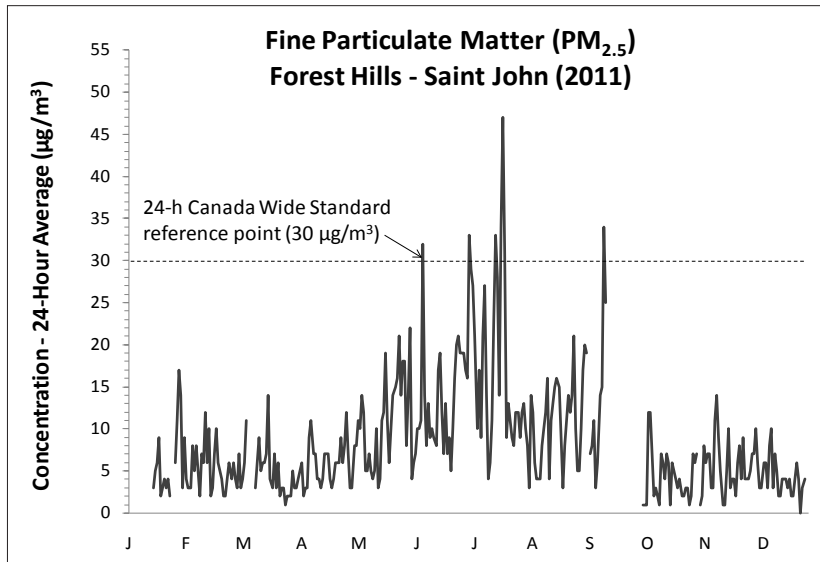
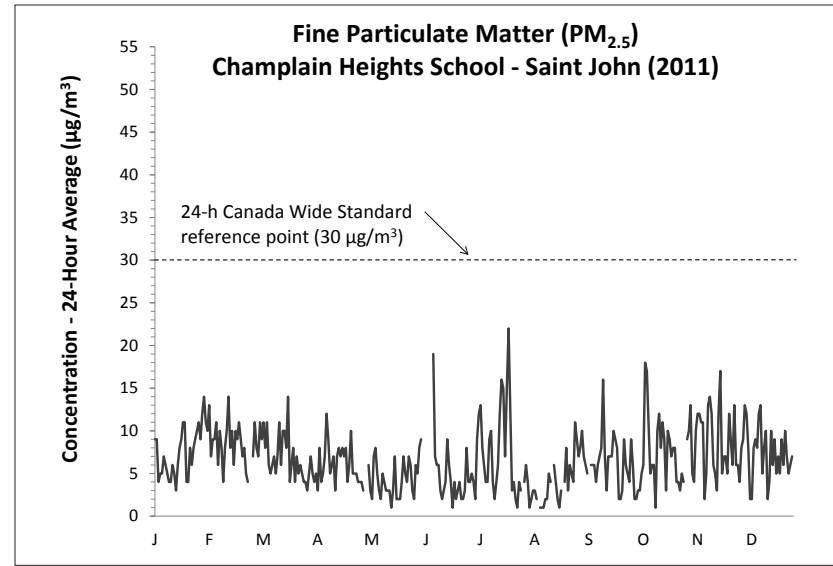
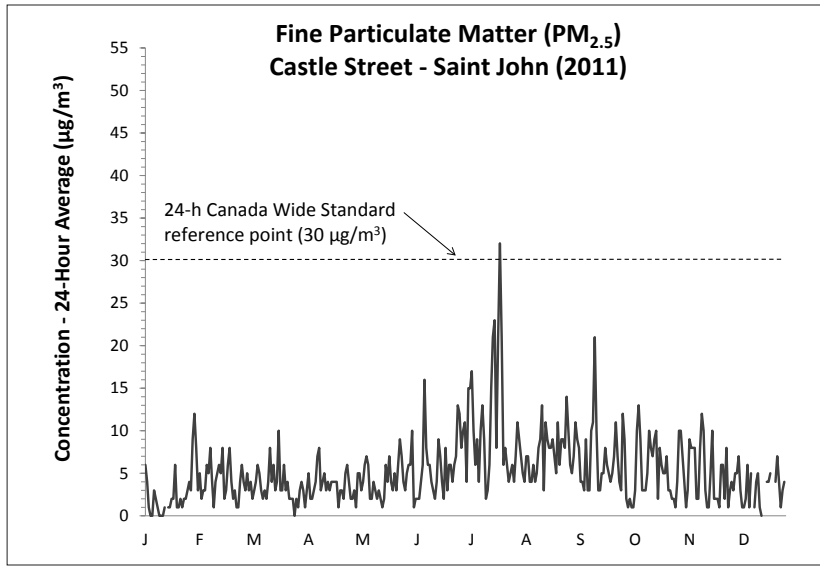
PART I: PROVINCIALY OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Fine Particulate Matter



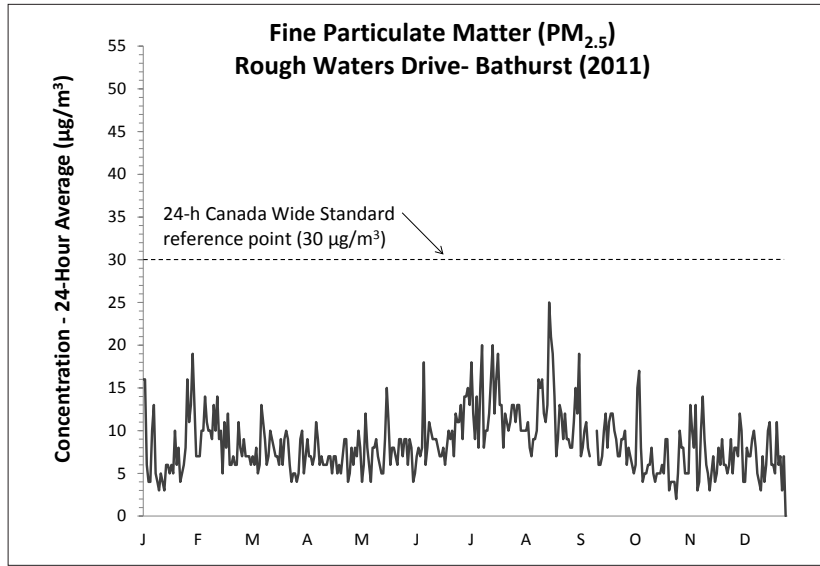
PART I: PROVINCIAL OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Fine Particulate Matter



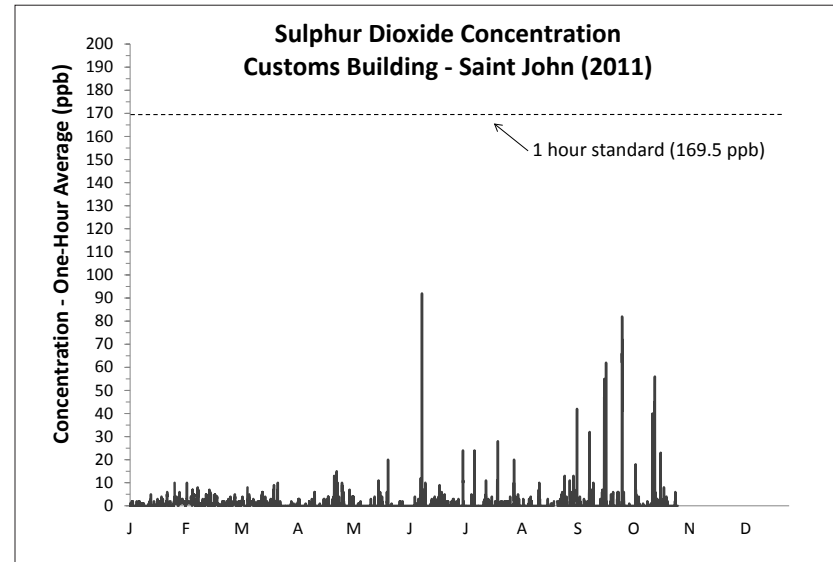
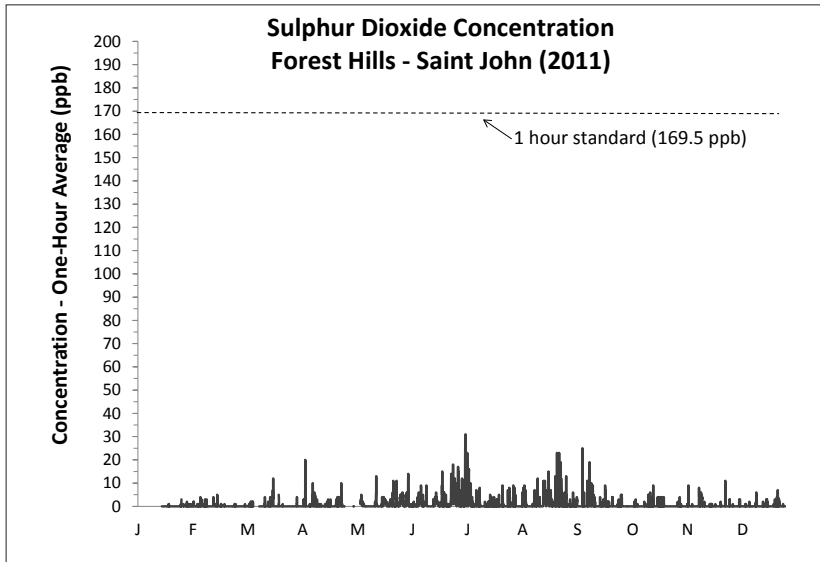
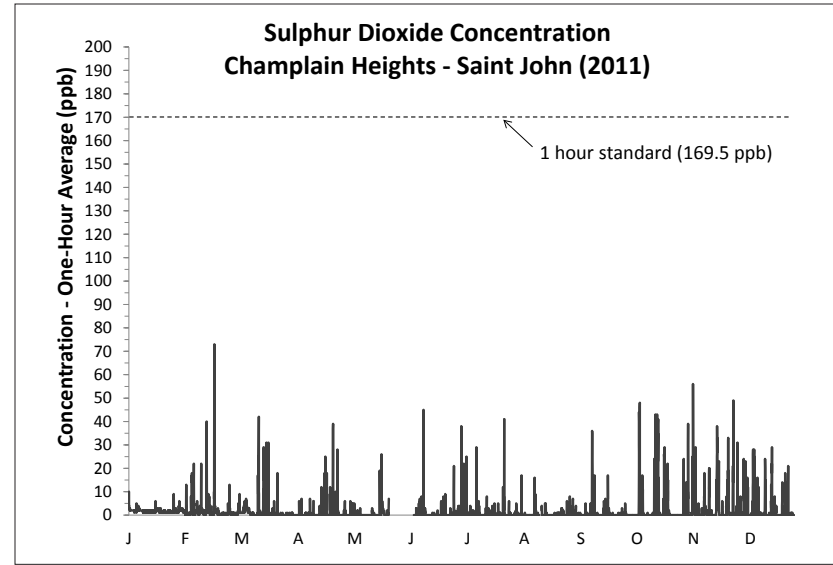
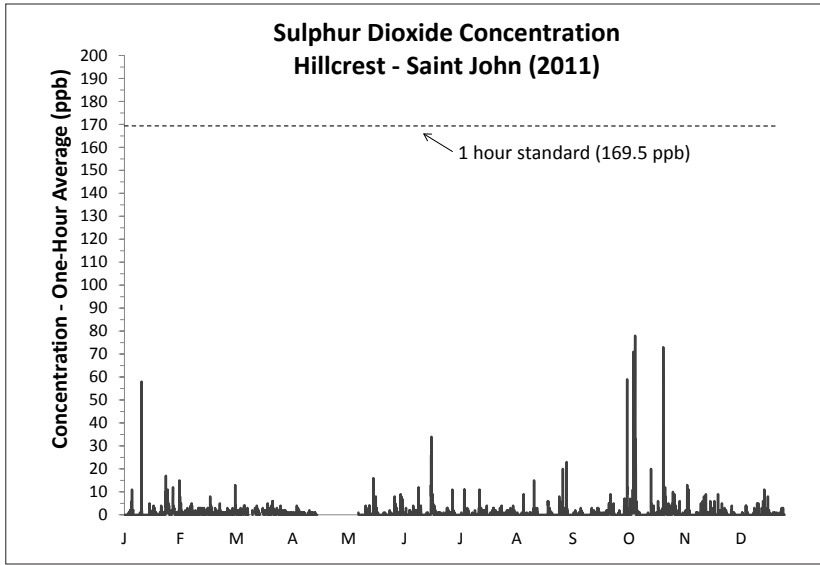
PART I: PROVINCIALLY OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Fine Particulate Matter



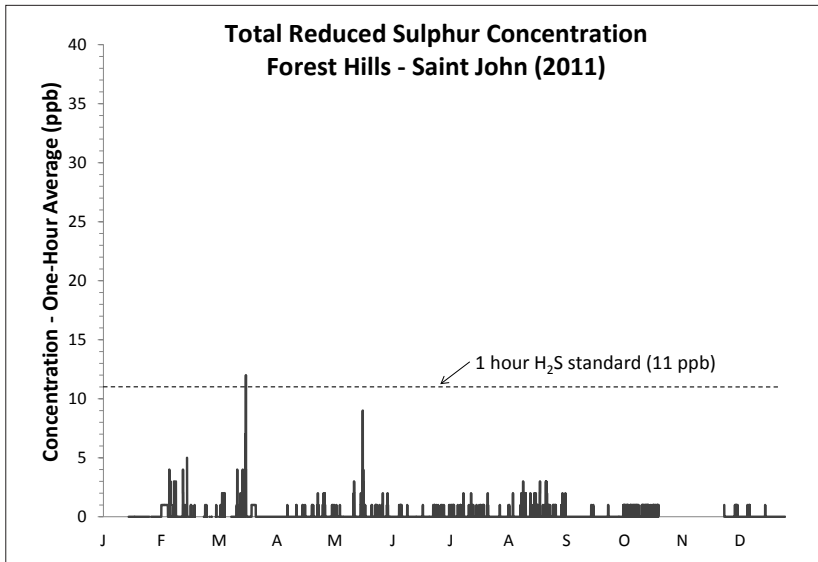
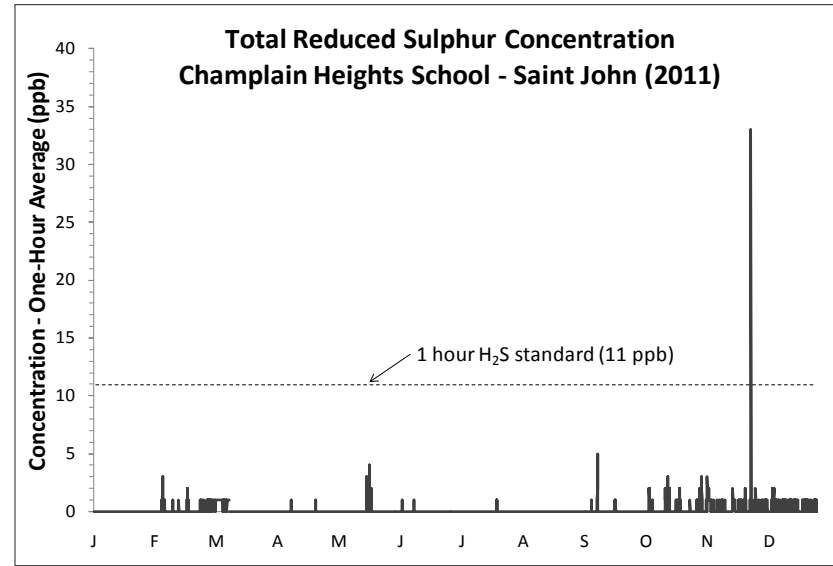
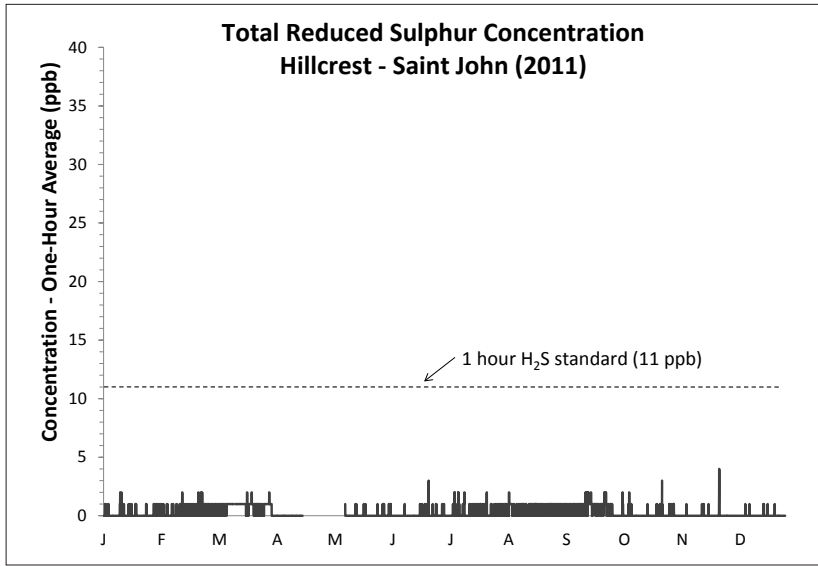
PART I: PROVINCIAL OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Sulphur Dioxide



PART I: PROVINCIALY OPERATED NETWORKS - Continuous Air Quality Monitoring Results

Total Reduced Sulphur



PART I: PROVINCIALY OPERATED NETWORKS - Volatile Organic Compounds, Saint John Region

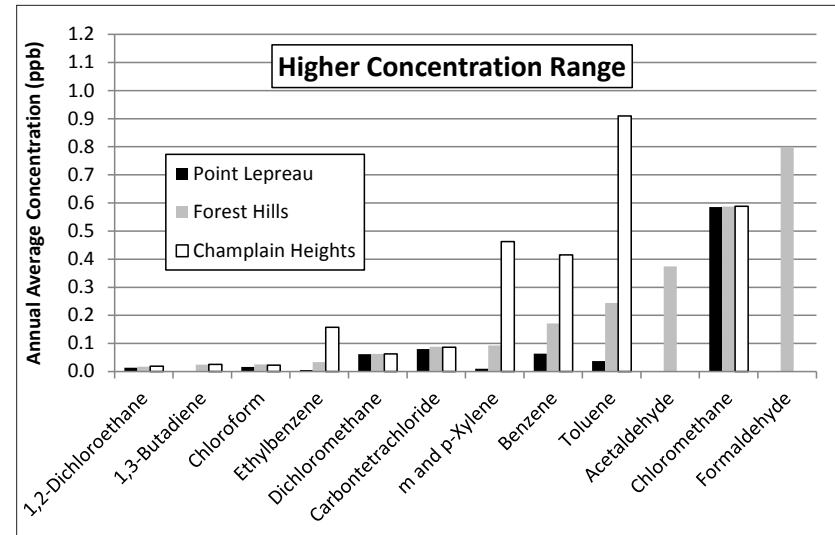
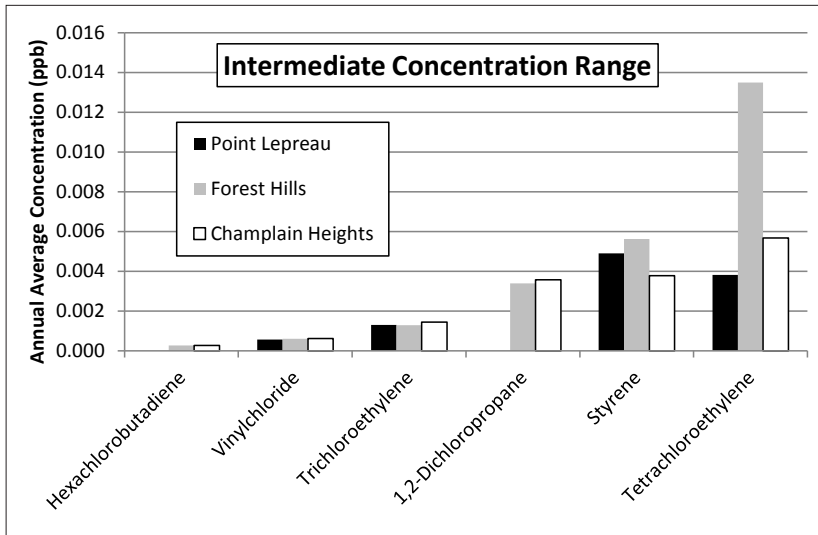
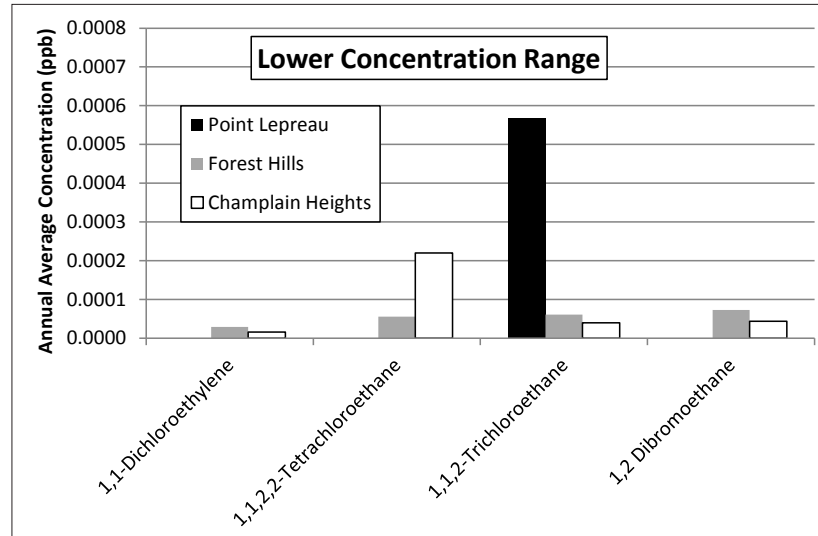
Air Toxics

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
1,1,2,2-Tetrachloroethane	*	0.00006	0.00022
1,1,2-Trichloroethane	0.00057	0.00006	0.00004
1,1-Dichloroethylene	*	0.00003	0.00002
1,2 Dibromoethane	*	0.00007	0.00004
1,2-Dichloroethane	0.01353	0.01707	0.01963
1,2-Dichloropropane	*	0.00339	0.00357
1,3-Butadiene	0.00161	0.02465	0.02600
Acetaldehyde	*	0.37466	*
Benzene	0.06373	0.17113	0.41571
Carbontetrachloride	0.08010	0.08806	0.08656
Chloroform	0.01642	0.02516	0.02273
Chloromethane	0.58539	0.58772	0.58819
Dichloromethane	0.06209	0.06267	0.06323
Ethylbenzene	0.00535	0.03415	0.15777
Formaldehyde	*	0.79919	*
Hexachlorobutadiene	*	0.00027	0.00027
m and p-Xylene	0.00998	0.09339	0.46290
Styrene	0.00489	0.00562	0.00378
Tetrachloroethylene	0.00381	0.01349	0.00568
Toluene	0.03751	0.24407	0.91010
Trichloroethylene	0.00130	0.00129	0.00144
Vinylchloride	0.00057	0.00060	0.00061

* Not available

PART I: PROVINCIALY OPERATED NETWORKS - Volatile Organic Compounds, Saint John Region

Air Toxics - Annual Average Concentration Range Charts

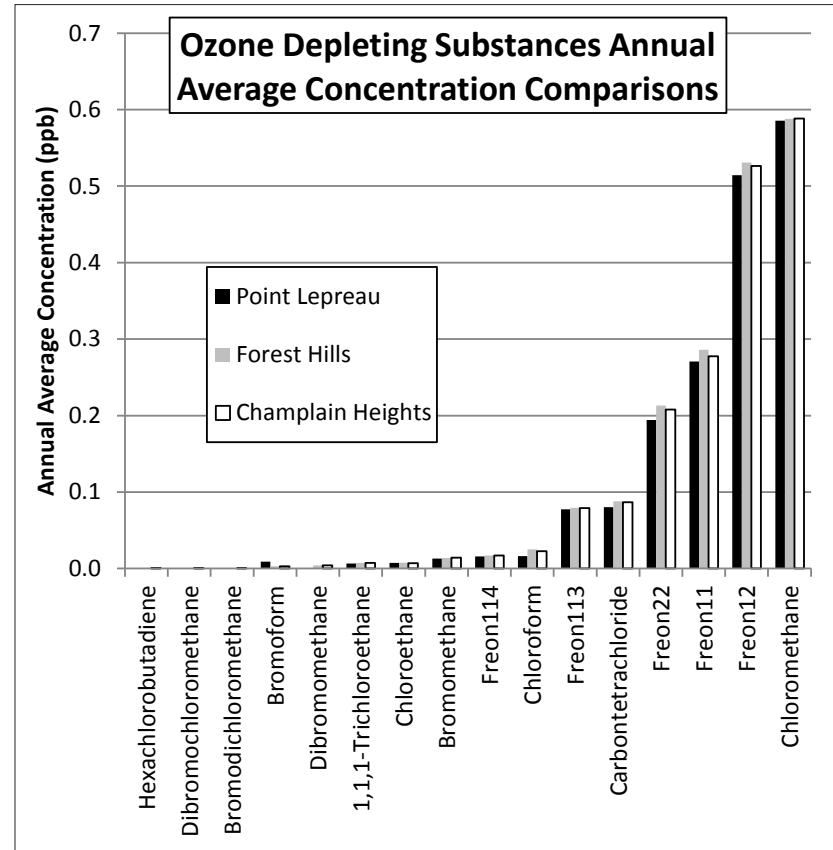


PART I: PROVINCIALY OPERATED NETWORKS - Volatile Organic Compounds - Saint John Region

Ozone Depleting Substances

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
1,1,1-Trichloroethane	0.00648	0.00735	0.00725
Bromodichloromethane	*	0.00052	0.00020
Bromoform	0.00889	0.00281	0.00290
Bromomethane	0.01323	0.01391	0.01434
Carbontetrachloride	0.08010	0.08806	0.08656
Chloroethane	0.00739	0.00795	0.00691
Chloroform	0.01642	0.02516	0.02273
Chloromethane	0.58539	0.58772	0.58819
Dibromochloromethane	*	0.00042	0.00043
Dibromomethane	*	0.00425	0.00417
Freon11	0.27078	0.28580	0.27752
Freon113	0.07727	0.07959	0.07902
Freon114	0.01590	0.01705	0.01716
Freon12	0.51423	0.53072	0.52618
Freon22	0.19431	0.21293	0.20797
Hexachlorobutadiene	*	0.00027	0.00027

* Not available



PART I: PROVINCIALLY OPERATED NETWORKS - Volatile Organic Compounds - Saint John Region

Smog-Forming VOCs

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
1,1,2,2-Tetrachloroethane	*	0.00006	0.00022
1,1,2-Trichloroethane	0.00057	0.00006	0.00004
1,1-Dichloroethane	*	0.00002	0.00004
1,1-Dichloroethylene	*	0.00003	0.00002
1,2,3-Trimethylbenzene	0.00108	0.01131	0.04424
1,2,4-Trichlorobenzene	*	0.00137	0.00149
1,2,4-Trimethylbenzene	0.00284	0.03428	0.14519
1,2-Dichlorobenzene	*	0.00049	0.00053
1,2-Dichloroethane	0.01353	0.01707	0.01963
1,2-Dichloropropane	*	0.00339	0.00357
1,2-Diethylbenzene	*	0.00182	0.00390
1,3,5-Trimethylbenzene	0.00085	0.00972	0.04590
1,3-Butadiene	0.00161	0.02465	0.02600
1,3-Dichlorobenzene	*	0.00044	0.00047
1,3-Diethylbenzene	0.00017	0.00260	0.00861
1,4-Dichlorobenzene	0.00110	0.00178	0.00150
1,4-Dichlorobutane	*	0.00000	0.00000
1,4-Diethylbenzene	0.00067	0.00823	0.02892
1-Butene/Isobutene	0.03520	0.23578	0.88161
1-Butyne	0.00009	0.00027	0.00013
1-Decene	*	0.00139	0.00110
1-Heptene	*	0.00805	0.00990
1-Hexene	0.00000	0.01938	0.12615
1-Methylcyclohexene	*	0.00106	0.00657
1-Methylcyclopentene	*	0.00635	0.07043
1-Nonene	*	0.00309	0.00081

* Not available

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
1-Octene	*	0.00551	0.00160
1-Pentene	0.00877	0.05842	0.33603
1-Propyne	0.00560	0.02442	0.01830
1-Undecene	*	0.00184	0.00097
2,2,3-Trimethylbutane	*	0.00182	0.00889
2,2,4-Trimethylpentane	0.00617	0.07400	0.26974
2,2,5-Trimethylhexane	0.00044	0.00625	0.01938
2,2-Dimethylbutane	0.00300	0.01517	0.06881
2,2-Dimethylhexane	0.00001	*	*
2,2-Dimethylpentane	0.00046	0.00351	0.02195
2,2-Dimethylpropane	0.00175	0.00718	0.03143
2,3,4-Trimethylpentane	0.00190	0.02602	0.09271
2,3-Dimethylbutane	0.00294	0.04515	0.32673
2,3-Dimethylpentane	0.00288	0.02787	0.14726
2,4-Dimethylhexane	0.00109	0.01256	0.06327
2,4-Dimethylpentane	0.00168	0.02114	0.11876
2,5-Dimethylhexane	0.00169	0.01272	0.05315
2-Ethyl-1-Butene	*	*	0.07634
2-Ethyltoluene	0.00092	0.01233	0.04335
2-Methyl-1-butene	0.00256	0.09802	0.65995
2-Methyl-2-butene	0.00177	0.08056	0.92704
2-Methylheptane	0.00255	0.02433	0.15211
2-Methylhexane	0.00562	0.05601	0.31742
2-Methylpentane	0.01328	0.17797	1.26459
2-Pentanone/Isovaleraldehyde	*	0.02911	*

* Not available

PART I: PROVINCIALY OPERATED NETWORKS - Volatile Organic Compounds - Saint John Region

Smog-Forming VOCs

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
3,6-Dimethyloctane	*	0.00315	0.01310
3-Ethyltoluene	0.00169	0.02110	0.09215
3-Methyl-1-butene	*	0.05067	0.13082
3-Methyl-1-pentene	0.00037	0.00348	0.02997
3-Methylheptane	0.00209	0.02002	0.12645
3-Methylhexane	0.00617	0.06361	0.34815
3-Methylpentane	0.01020	0.11894	0.82733
4-Ethyltoluene	0.00092	0.01116	0.04450
4-Methyl-1-pentene	0.00061	0.00207	0.02205
4-Methylheptane	0.00090	0.00874	0.05287
Acetaldehyde	*	0.37466	*
Acetylene	0.22961	0.38012	0.33644
Acrolein	*	0.00959	*
a-Pinene	0.02052	0.20061	0.07934
Benzaldehyde	*	0.03742	*
Benzene	0.06373	0.17113	0.41571
Benzylchloride	*	0.00040	0.00017
b-Pinene	0.01348	0.07220	0.05106
Butane	0.17462	1.25824	5.13982
Camphene	0.01601	0.04676	0.05693
Chlorobenzene	0.00334	0.00161	0.00089
cis-1,2-Dichloroethylene	*	0.00004	0.00002
cis-1,2-Dimethylcyclohexane	0.00000	0.00419	0.02920
cis-1,3-Dichloropropene	*	0.00000	0.00000
cis-1,3-Dimethylcyclohexane	0.00405	0.01585	0.14294

* Not available

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
cis-1,4/t-1,3-Dimethylcyclohexane	0.00119	0.00492	0.04582
cis-2-Butene	0.00211	0.16676	0.30403
cis-2-Heptene		0.00001	0.00044
cis-2-Hexene	0.00033	0.00774	0.08054
cis-2-Pentene	0.00072	0.04145	0.38013
cis-3-Methyl-2-pentene	0.00000	0.00820	0.07869
cis-4-Methyl-2-pentene	0.00003	0.00642	0.05994
Crotonaldehyde	*	0.00373	*
Cyclohexane	0.00710	0.09001	0.72322
Cyclohexene	*	0.00004	0.00053
Cyclopentane	0.00450	0.05945	0.42792
Cyclopentene	0.00065	0.00861	0.09452
Decane	0.00351	0.05292	0.14882
d-Limonene	0.00472	0.01186	0.01587
Dodecane	0.00952	0.03880	0.05234
Ethane	1.55537	2.59267	3.39319
Ethylbenzene	0.00535	0.03415	0.15777
Ethylbromide	*	0.00040	0.00037
Ethylene	0.22599	0.61469	0.52478
Formaldehyde	*	0.79919	*
Heptane	0.00748	0.07493	0.40562
Hexanal	*	0.01922	*
Hexane	0.01558	0.16560	1.07274
Hexylbenzene	*	0.00112	0.00165

* Not available

PART I: PROVINCIALY OPERATED NETWORKS - Volatile Organic Compounds - Saint John Region

Smog-Forming VOCs

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
Indane	0.00048	0.00420	0.01682
Isobutane	0.09855	0.91146	2.80931
iso-Butylbenzene	0.00015	0.00108	0.00424
Isopentane	0.08294	1.10792	6.25614
Isoprene	0.02444	0.05788	0.06651
iso-Propylbenzene	0.00066	0.00339	0.01748
m and p-Xylene	0.00998	0.09339	0.46290
Methyl Ethyl Ketone	*	0.12716	*
Methyl Isobutyl Ketone	*	0.00741	*
Methyl Tert-Butyl Ether	*	0.00071	0.00012
Methylcyclohexane	0.00646	0.07983	0.71781
Methylcyclopentane	0.00658	0.09941	0.73178
m-Tolualdehyde	*	0.03080	*
Naphthalene	0.00265	0.01184	0.01802
n-Butylbenzene	0.00021	0.00264	0.00982
Nonane	0.00510	0.03765	0.17738
n-Propylbenzene	0.00118	0.00837	0.03761
Octane	0.00599	0.04020	0.23337
o-Tolualdehyde	*	0.00049	*
o-Xylene	0.00409	0.03413	0.16125
p-Cymene	0.00282	0.00608	0.00958
Pentane	0.05920	0.57592	3.65055
Propane	0.56130	2.21272	2.96541
Propionaldehyde	*	0.06849	*
Propylene	0.04974	1.65715	0.43033

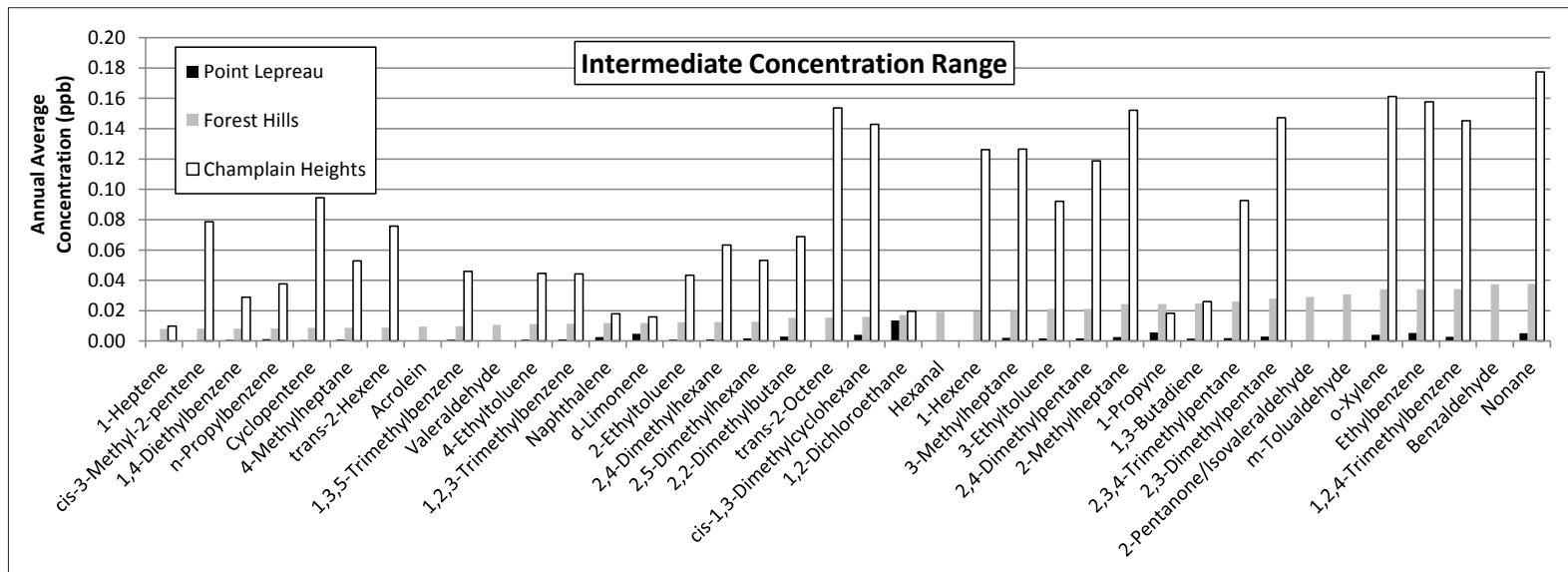
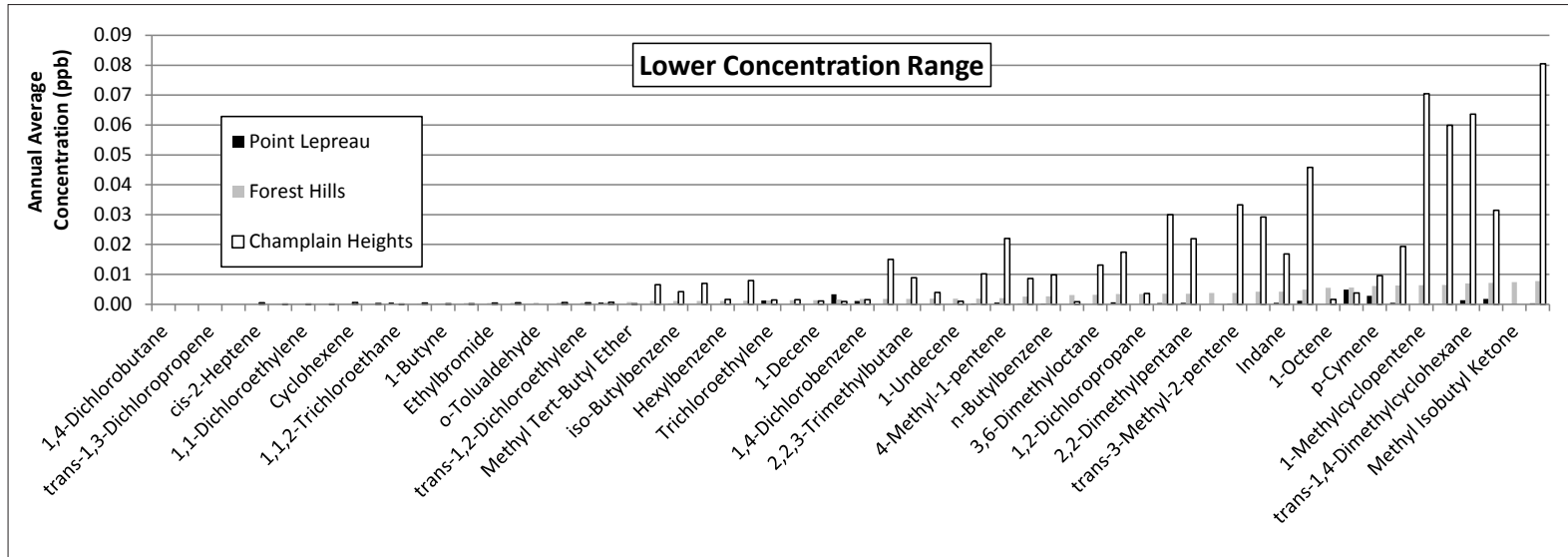
* Not available

Parameter	Annual Average Concentration (ppb)		
	Point Lepreau	Forest Hills	Champlain Heights
p-Tolualdehyde	*	0.00000	*
sec-Butylbenzene	0.00018	0.00190	0.01018
Styrene	0.00489	0.00562	0.00378
tert-Butylbenzene	*	0.00013	0.00039
Toluene	0.03751	0.24407	0.91010
trans-1,2-Dichloroethylene	*	0.00050	0.00047
trans-1,2-Dimethylcyclohexane	0.00347	*	0.00000
trans-1,3-Dichloropropene	*	0.00000	0.00000
trans-1,4-Dimethylcyclohexane	0.00133	0.00699	0.06364
trans-2-Butene	0.00243	0.14835	0.37700
trans-2-Heptene	*	0.00112	0.00697
trans-2-Hexene	0.00038	0.00877	0.07582
trans-2-Octene	*	0.01538	0.15367
trans-2-Pentene	0.00125	0.07565	0.67150
trans-3-Heptene	*	0.00118	0.00793
trans-3-Methyl-2-pentene	0.00019	0.00373	0.03325
trans-4-Methyl-2-pentene	*	0.00178	0.01500
Trichloroethylene	0.00130	0.00129	0.00144
Undecane	0.00369	0.04621	0.08723
Valeraldehyde	*	0.01061	*
Vinylchloride	0.00057	0.00060	0.00061

* Not available

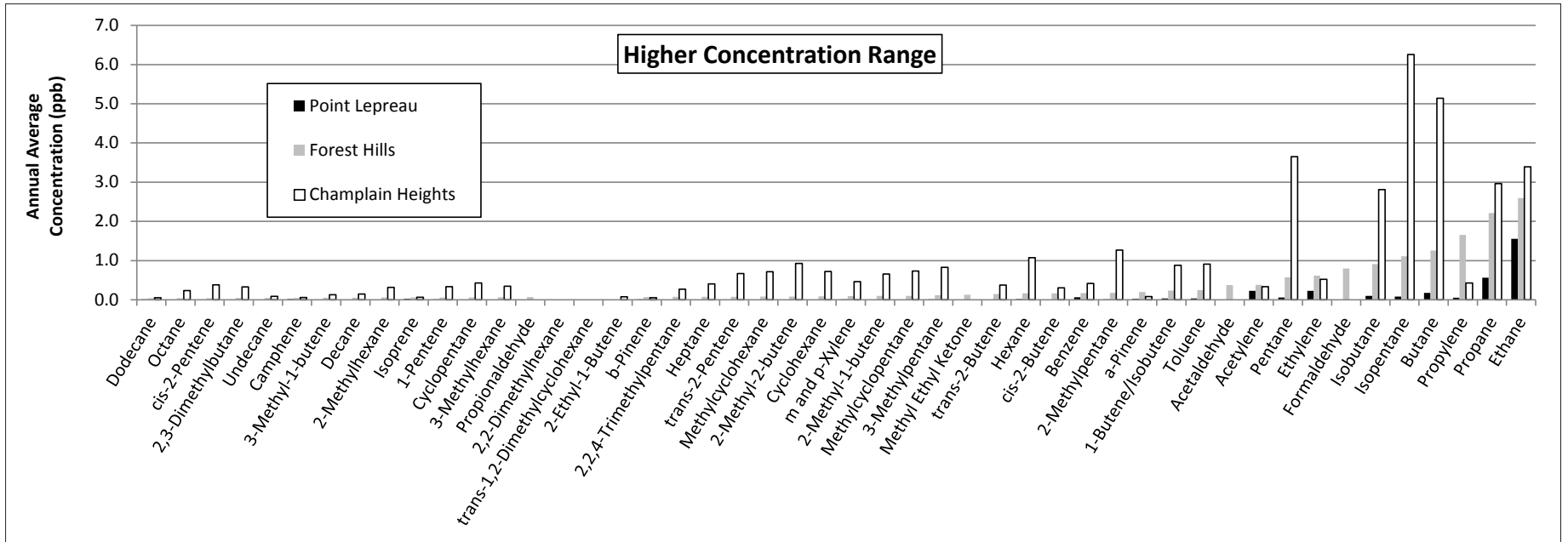
PART I: PROVINCIALLY OPERATED NETWORKS - Volatile Organic Compounds - Saint John Region

Smog-Forming VOCs - Annual Average Concentration Range Charts



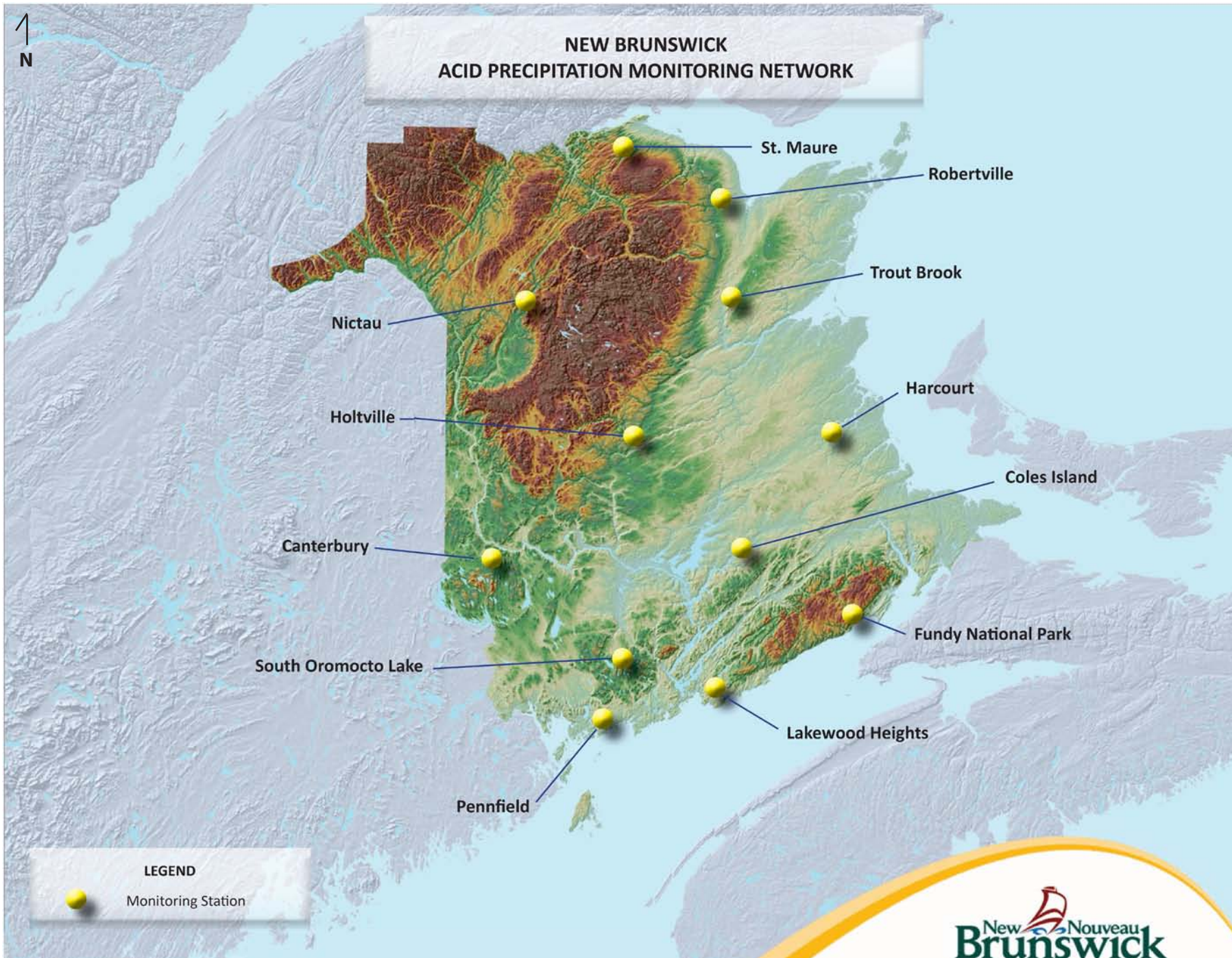
PART I: PROVINCIALY OPERATED NETWORKS - Volatile Organic Compounds - Saint John Region

Smog-Forming VOCs - Annual Average Concentration Range Charts



PART II:

ACID PRECIPITATION MONITORING NETWORK



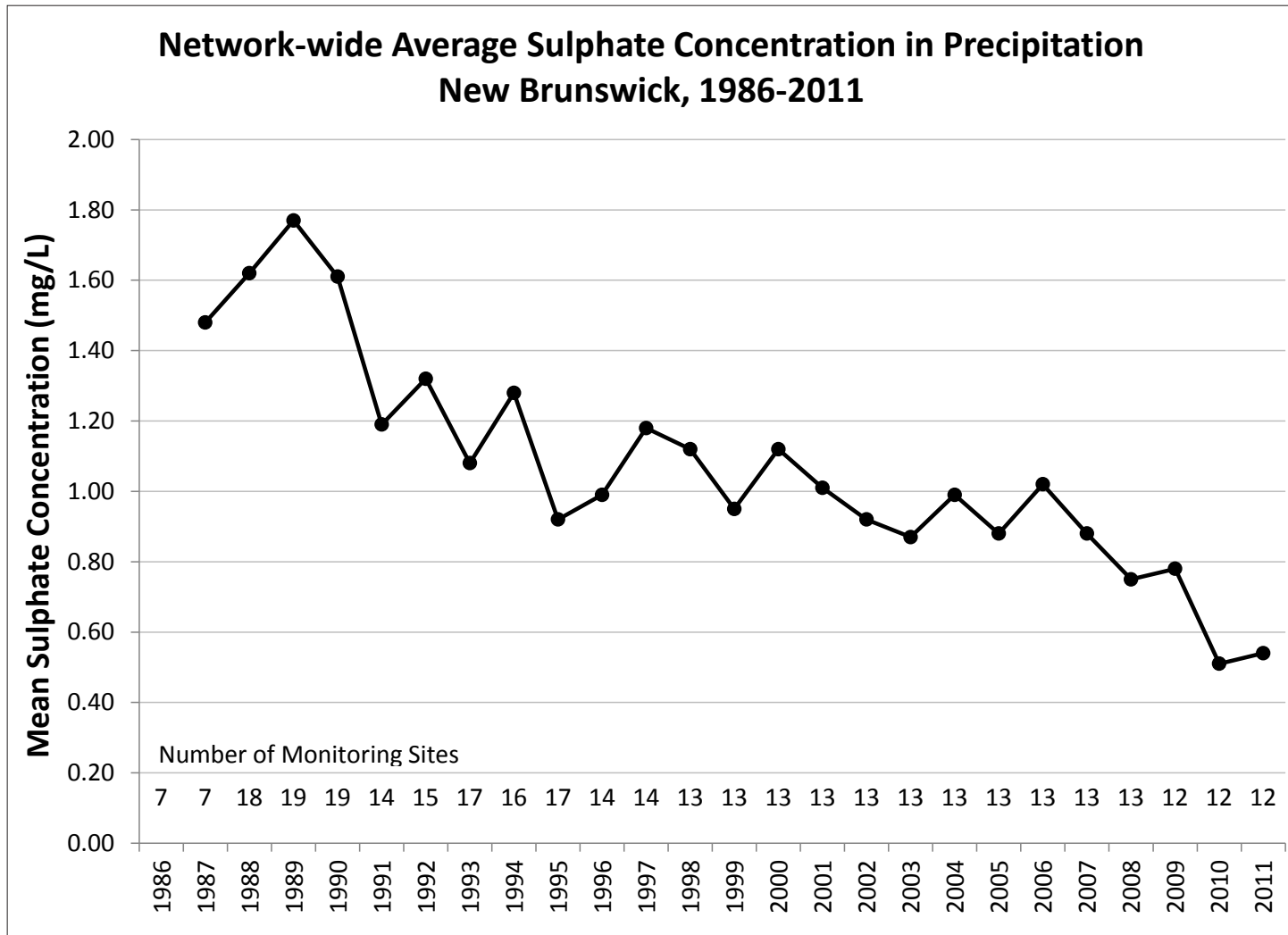
PART II: ACID PRECIPITATION MONITORING NETWORK - Sulphate Deposition Trends

Annual Sulphate Wet Deposition (kg/ha/yr) at New Brunswick Monitoring Sites, 2001-2011

Site	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
St. Maure	7.38	8.27	9.05	8.00	11.51	10.89	10.62	11.02	7.67	7.80	7.19
Robertville	8.51	11.24	8.14	8.56	14.20	13.34	10.49	10.32	8.76	8.06	7.38
Nictau	12.54	10.80	7.30	8.20	9.53	11.72	7.91**	8.21	6.44	5.01	6.07
Trout Brook	10.16	9.54	9.52	6.68	11.33	11.28	9.17	8.26	6.91	5.69	5.49
Holtville	9.11	11.12	11.18	8.83	12.63	12.64	9.26	11.43	8.93	4.99	7.52
Harcourt	7.67	10.35	10.55	7.78	10.72	10.90	8.79	10.92	8.52	6.76	5.69
Canterbury	8.70	12.00	9.97	7.52	13.86	---	---	9.92	7.29	5.49	8.00
Coles Island	7.79	11.03	11.13	8.64	9.86	9.62	9.38	8.39	7.43	5.44	5.84
South Oromocto Lake	10.19	11.89	12.37	---	---	12.96	11.55	11.89	9.80	6.77	6.73
Pennfield	11.54	16.43	14.55	14.01	19.67	18.85	14.41	17.81	15.20	12.49	---
Lakewood Heights	10.83	19.17	19.96	14.07	14.79*	16.64	13.32	15.67	13.48	8.29	---
Fundy	14.65	17.76	16.55	14.40	19.00	19.51	14.53	18.79	13.91	9.65	11.20

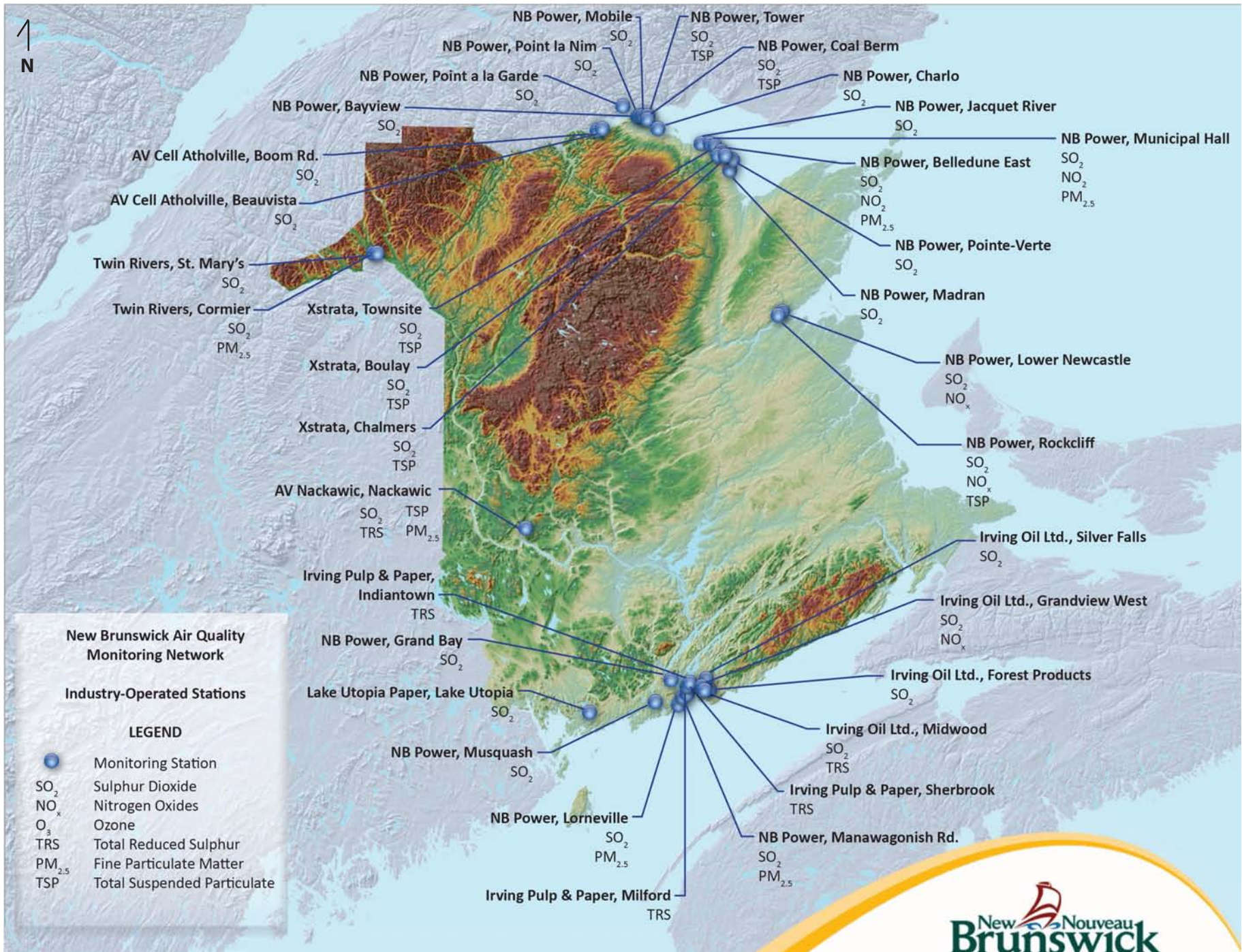
--- insufficient data
 * 48 Weeks reporting
 ** 49 Weeks reporting

PART II: ACID PRECIPITATION MONITORING NETWORK - Network-wide Annual Mean Sulphate Concentration Trend

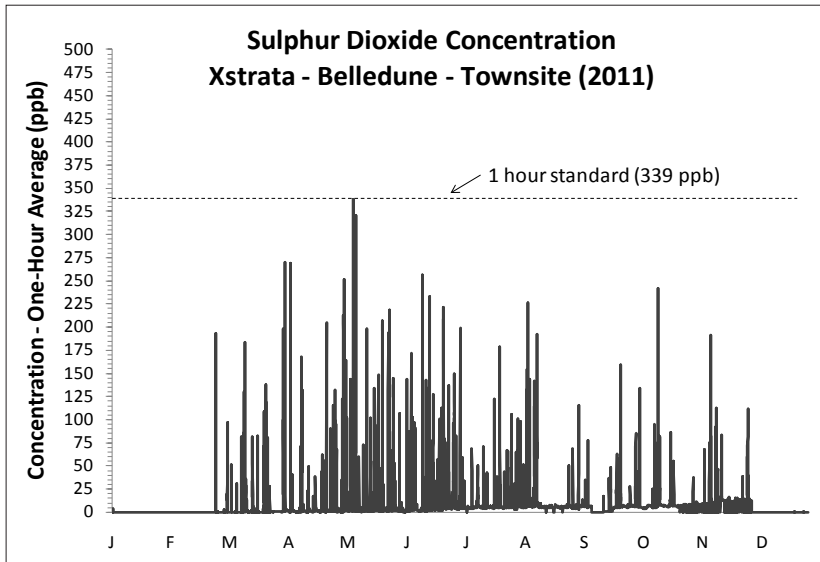
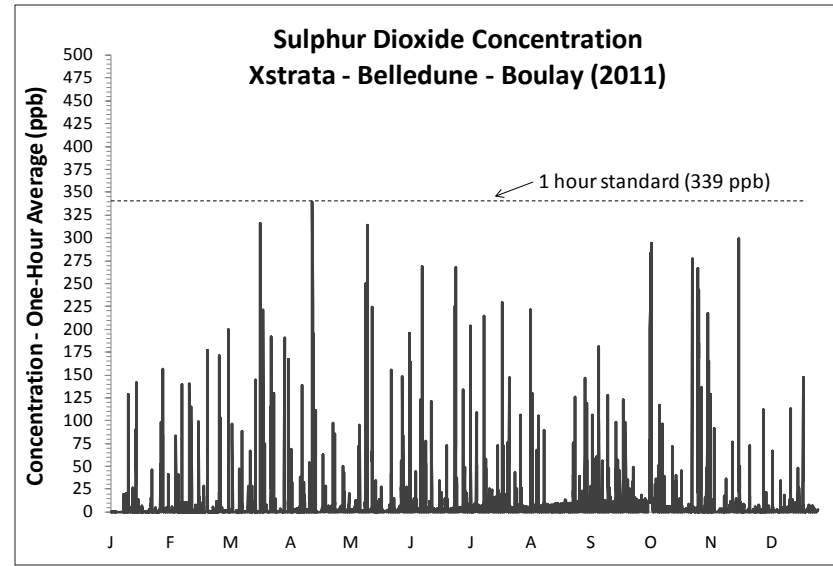
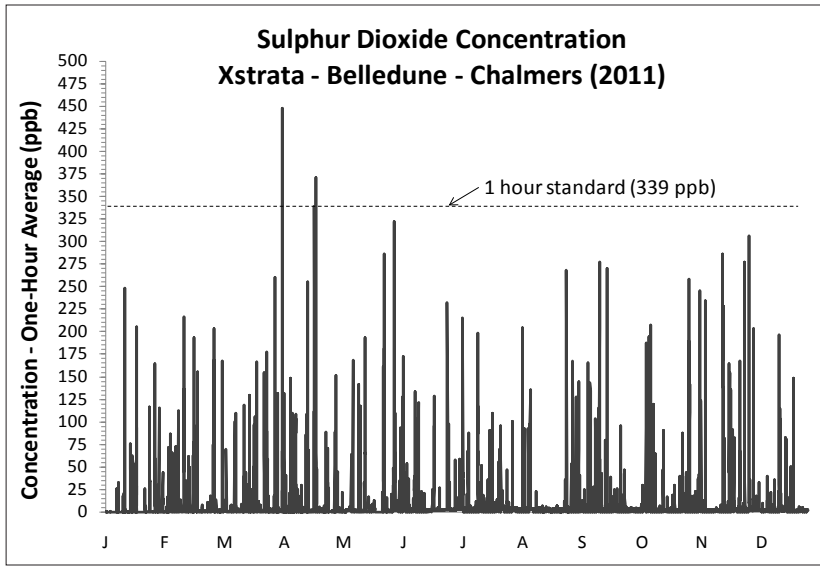


PART III:

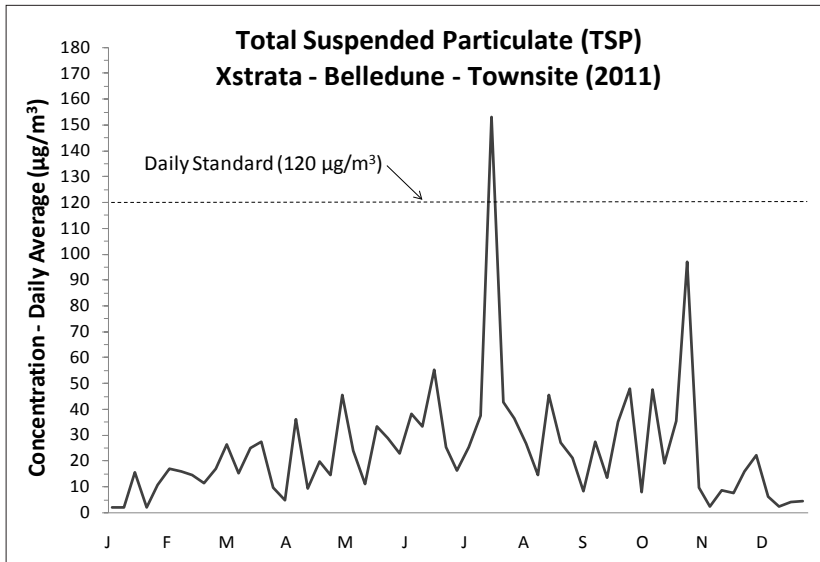
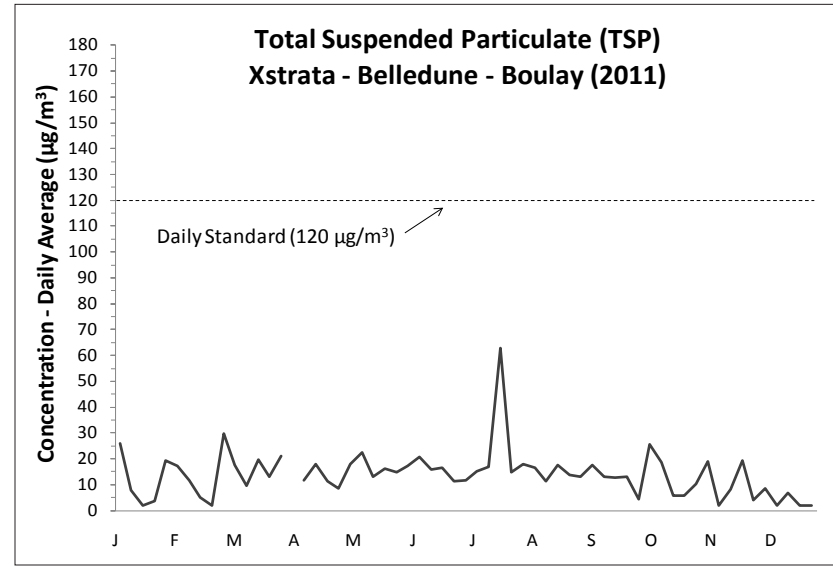
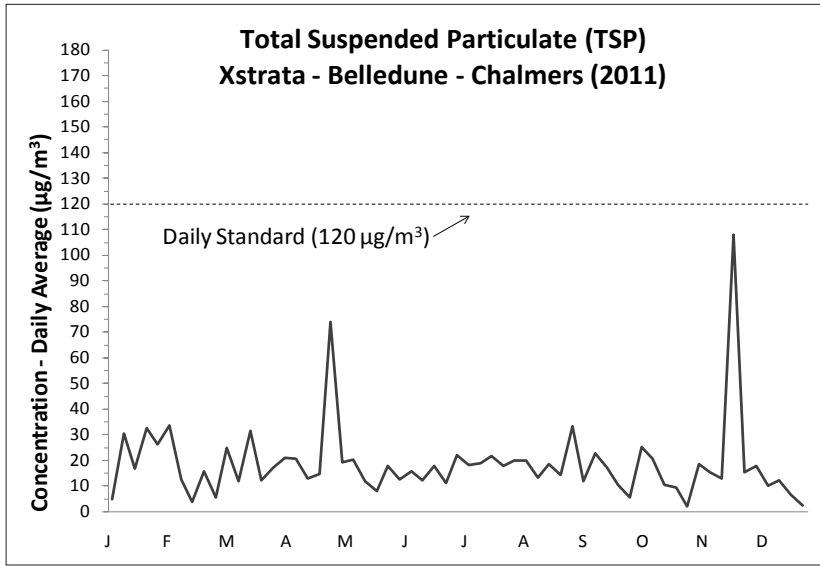
INDUSTRY-OPERATED AIR QUALITY MONITORING NETWORKS



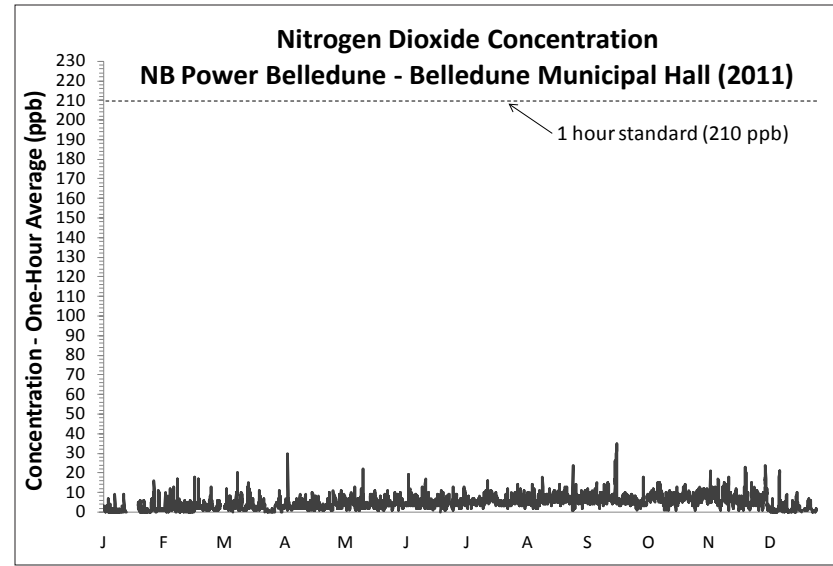
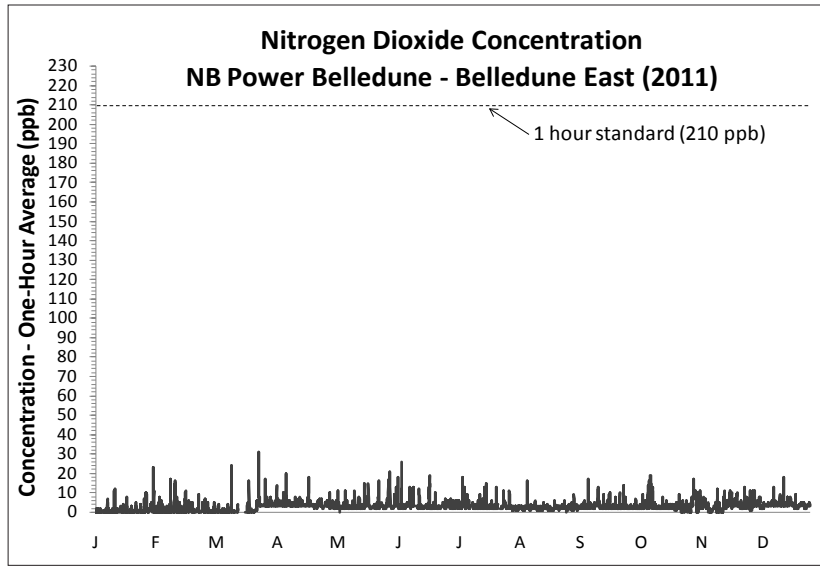
PART III: INDUSTRY-OPERATED NETWORKS - Xstrata, Belledune - Sulphur Dioxide



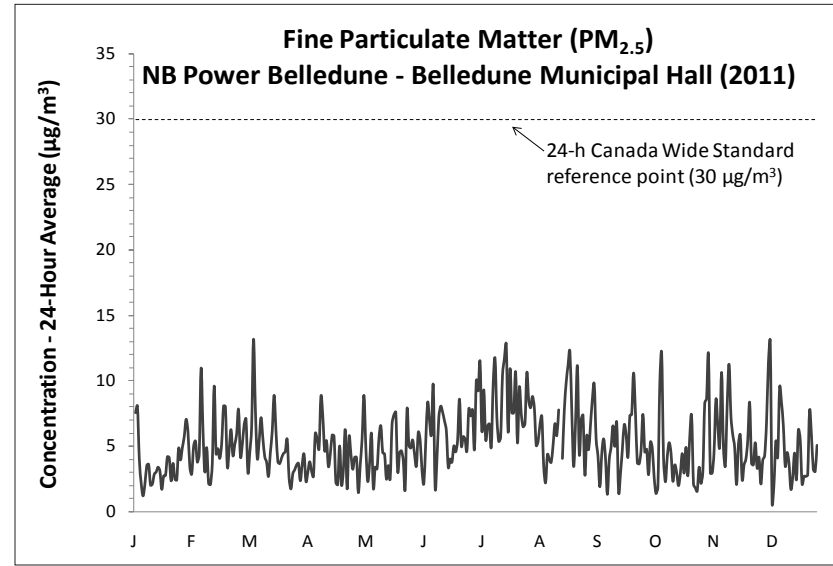
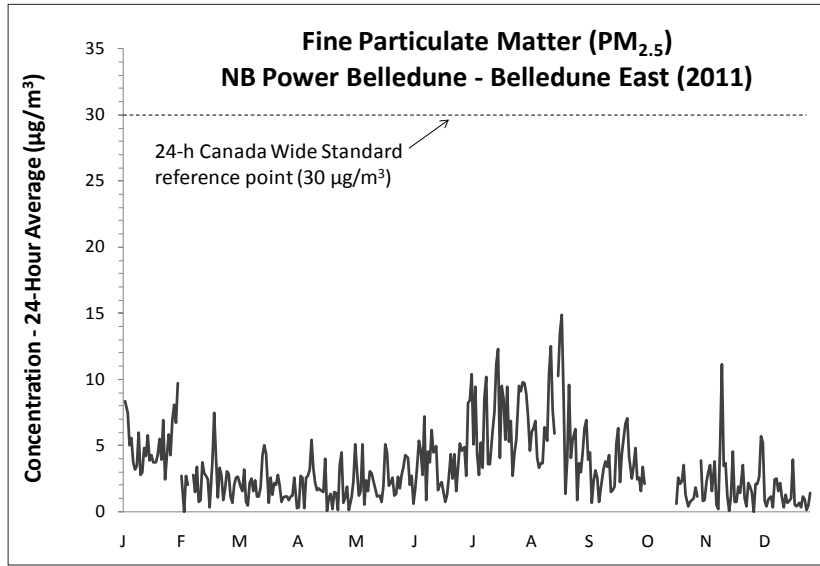
PART III: INDUSTRY-OPERATED NETWORKS - Xstrata, Belledune - Total Suspended Particulate



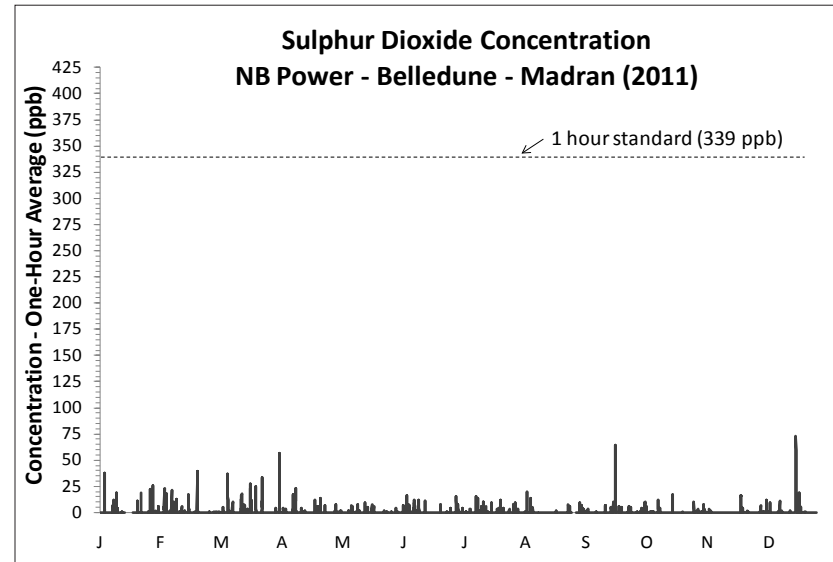
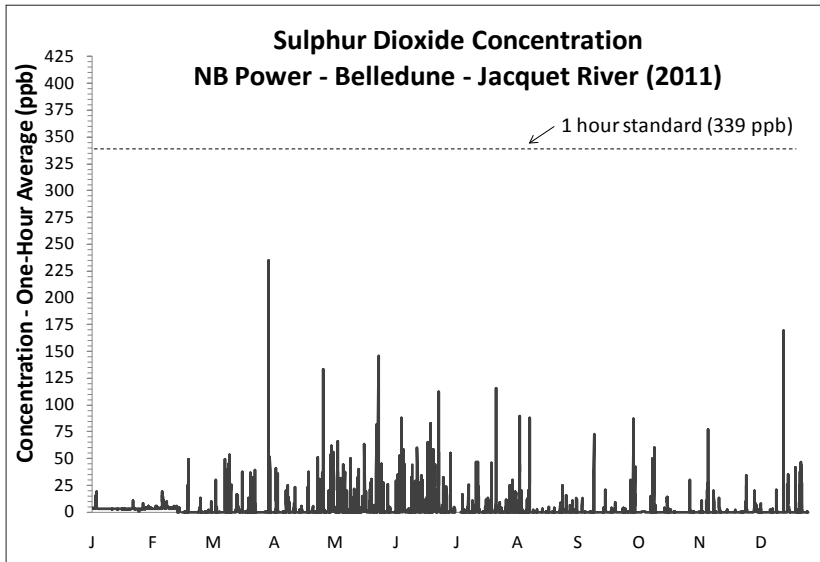
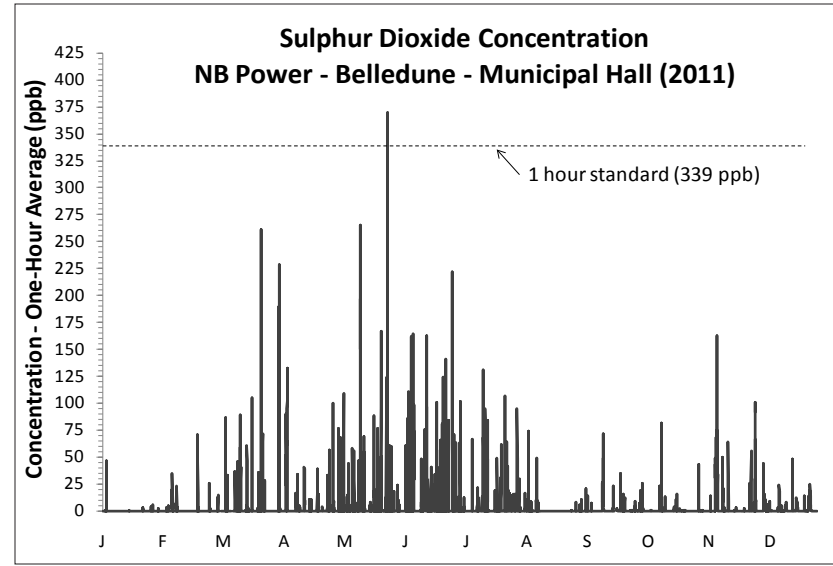
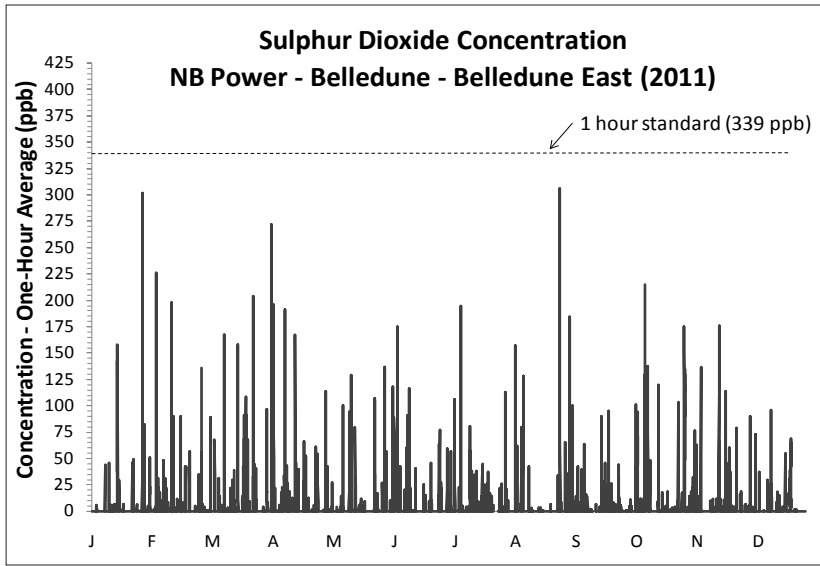
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Belledune - Nitrogen Dioxide



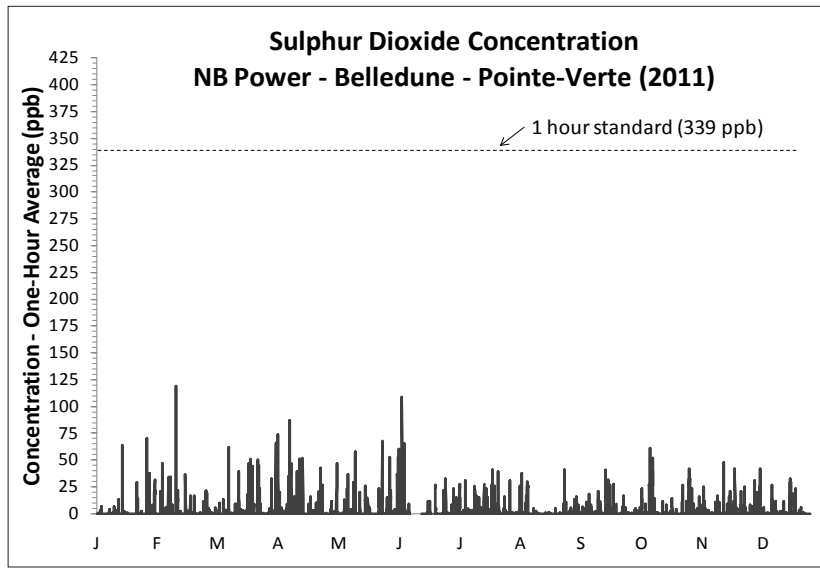
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Belledune - Fine Particulate Matter



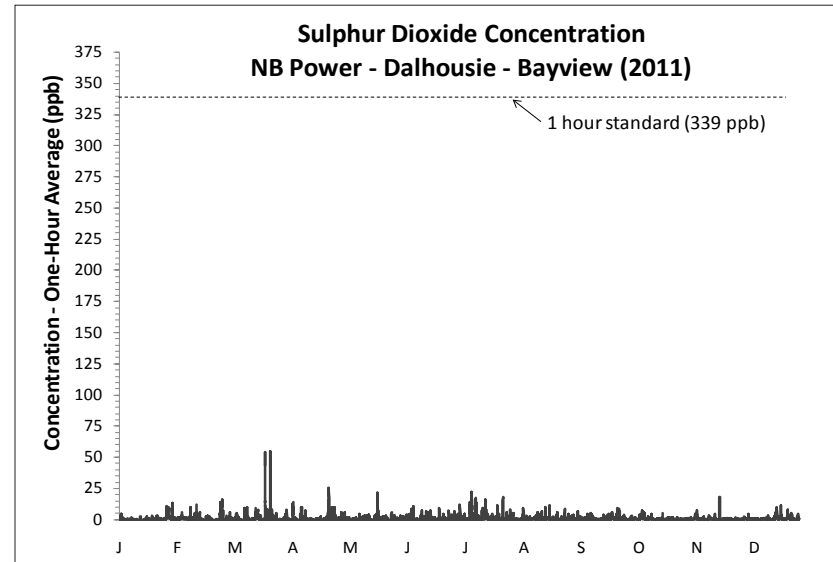
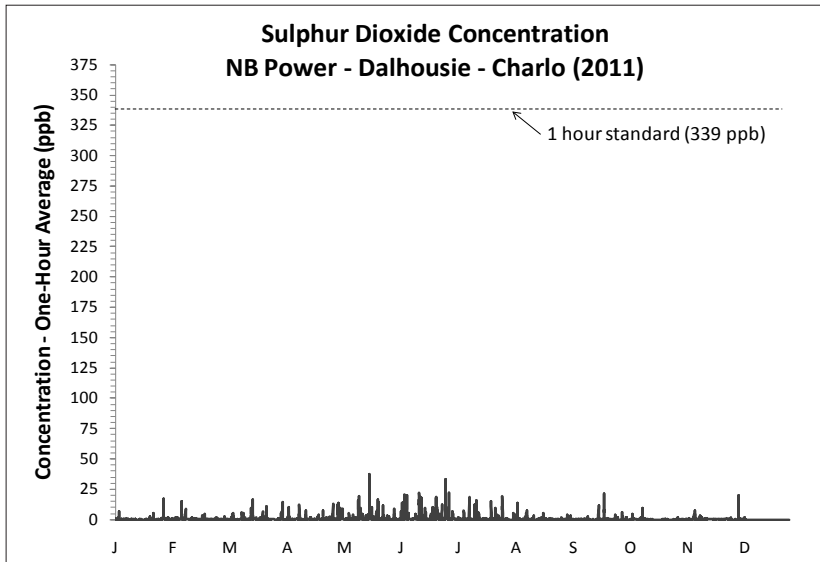
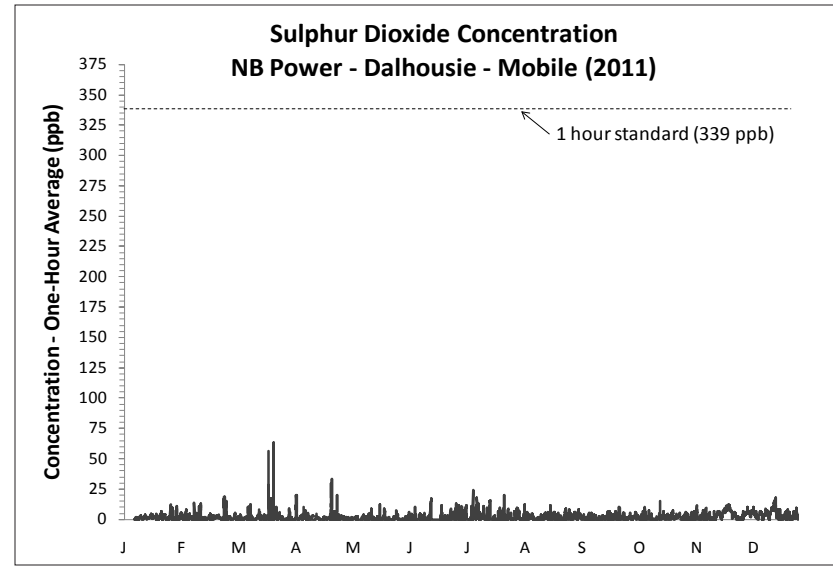
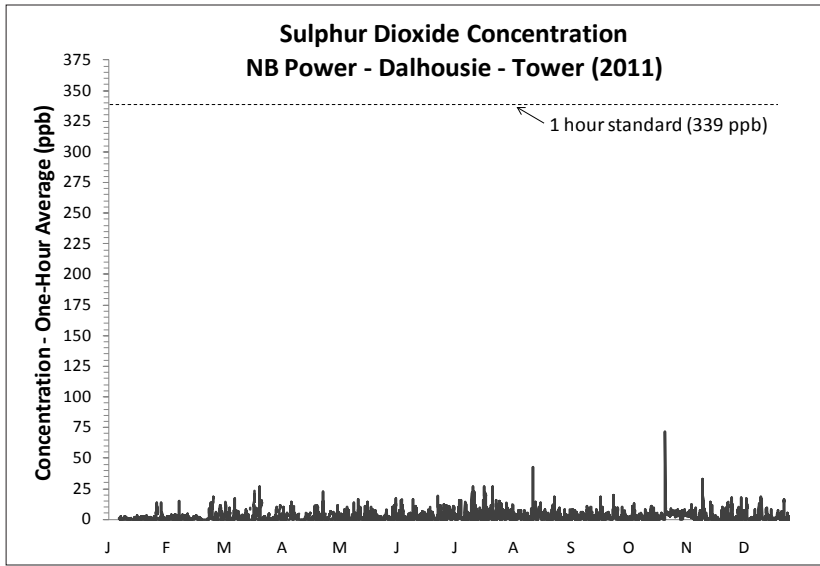
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Belledune - Sulphur Dioxide



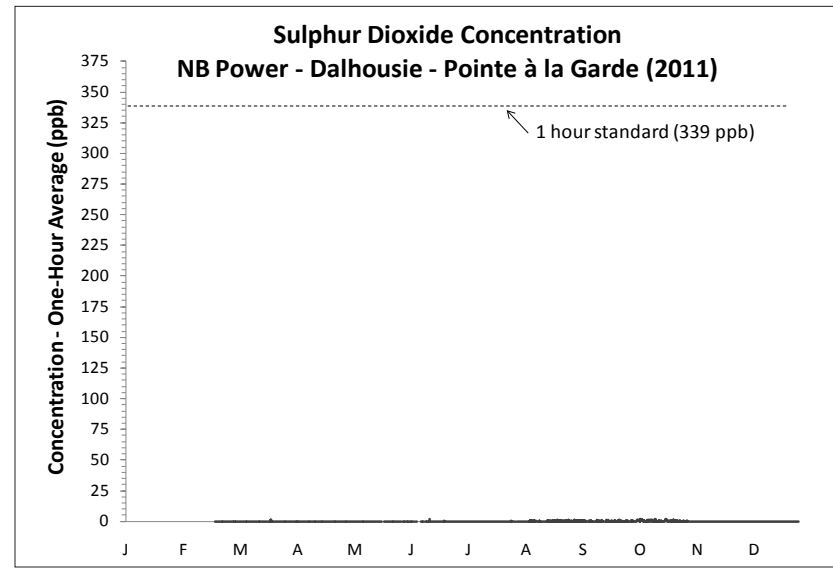
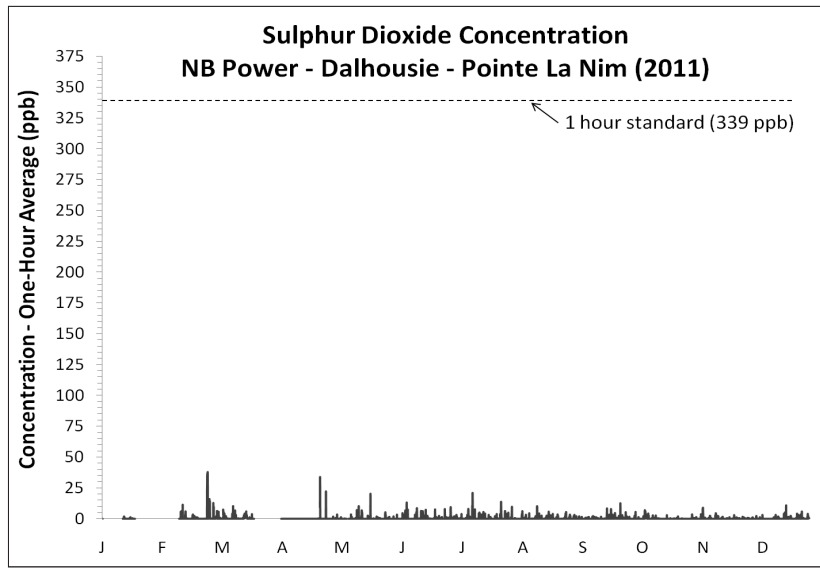
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Belledune - Sulphur Dioxide



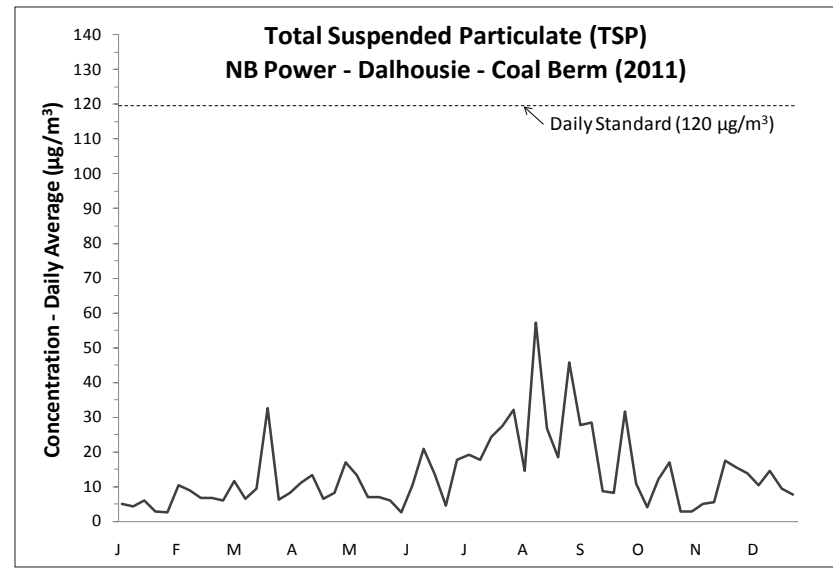
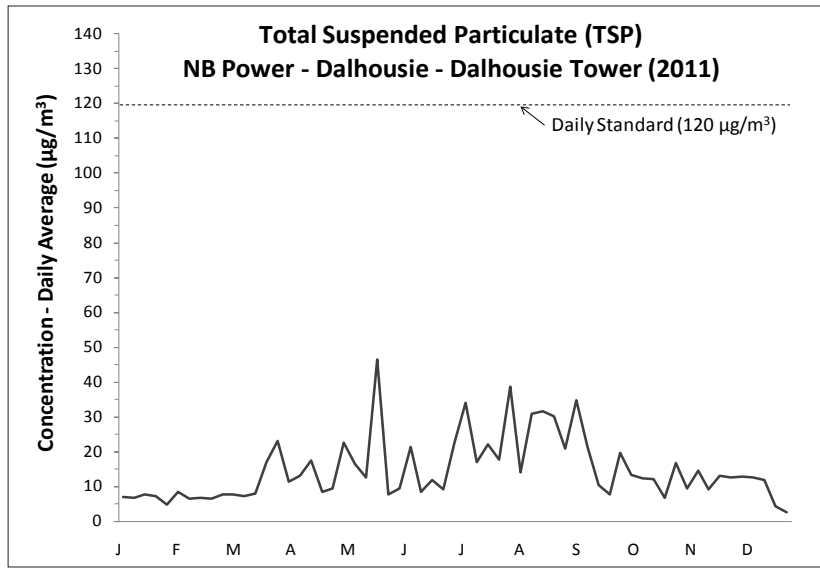
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Dalhousie - Sulphur Dioxide



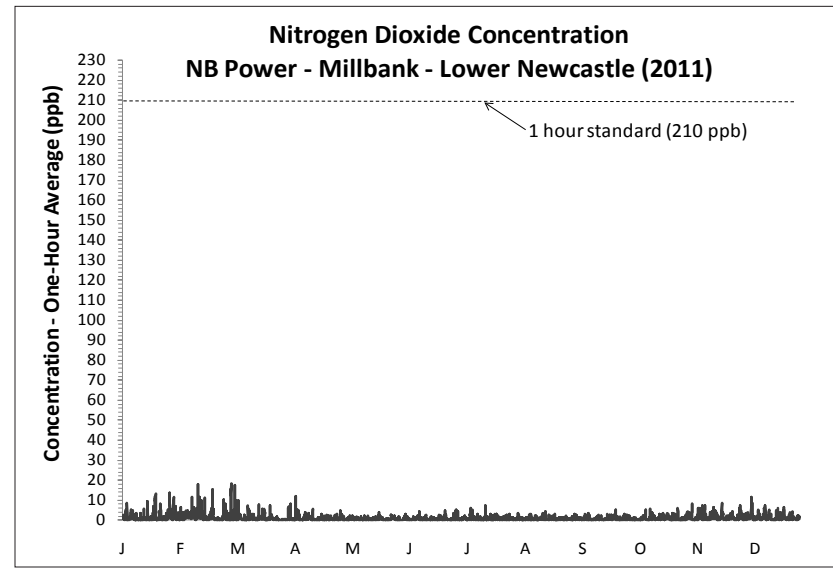
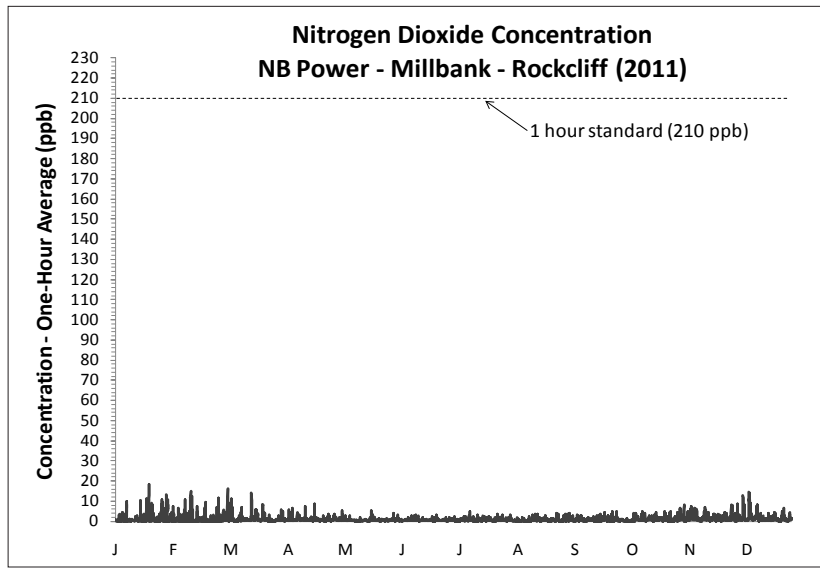
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Dalhousie - Sulphur Dioxide



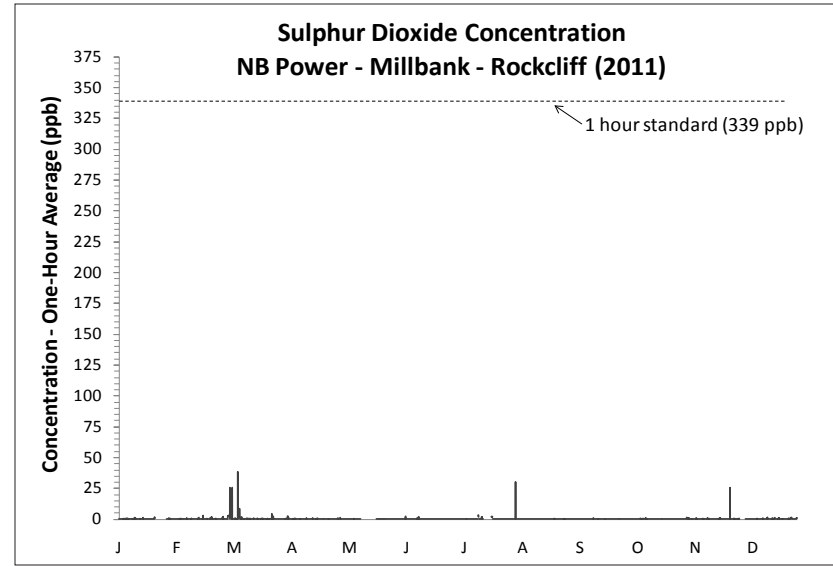
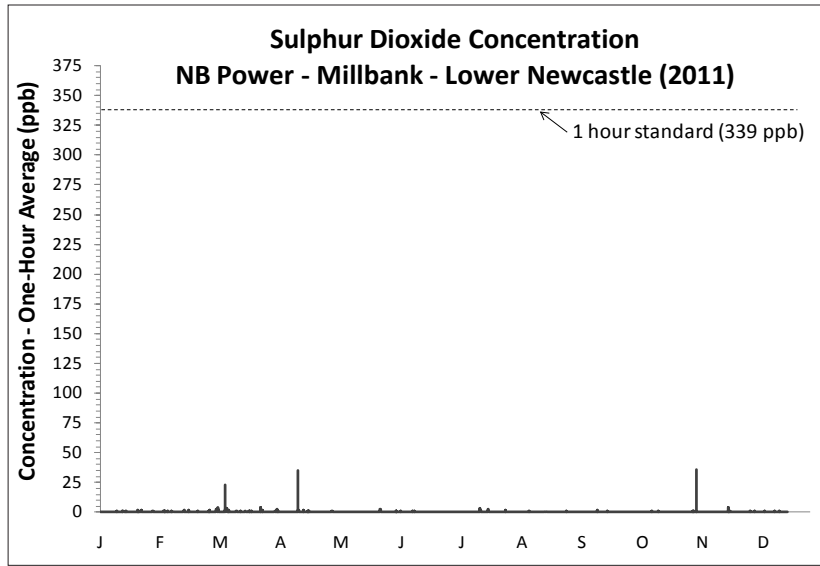
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Dalhousie - Total Suspended Particulate



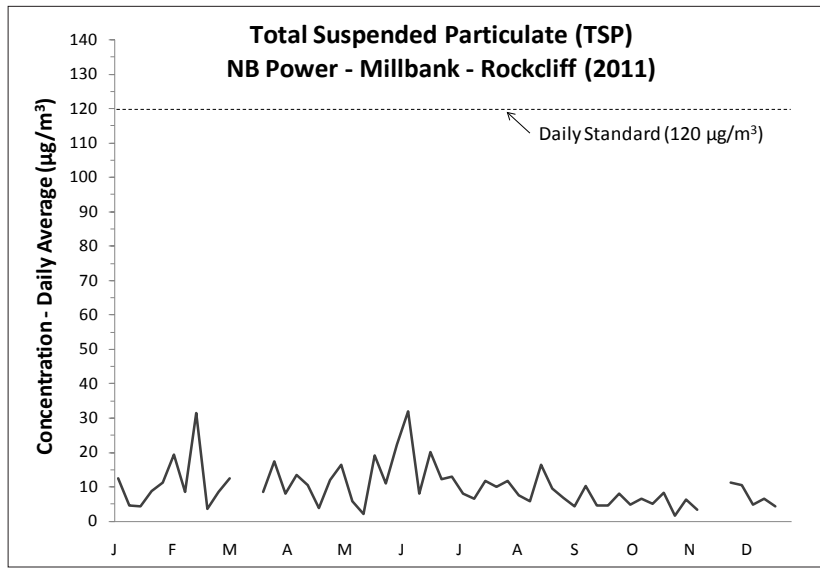
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Millbank - Nitrogen Dioxide



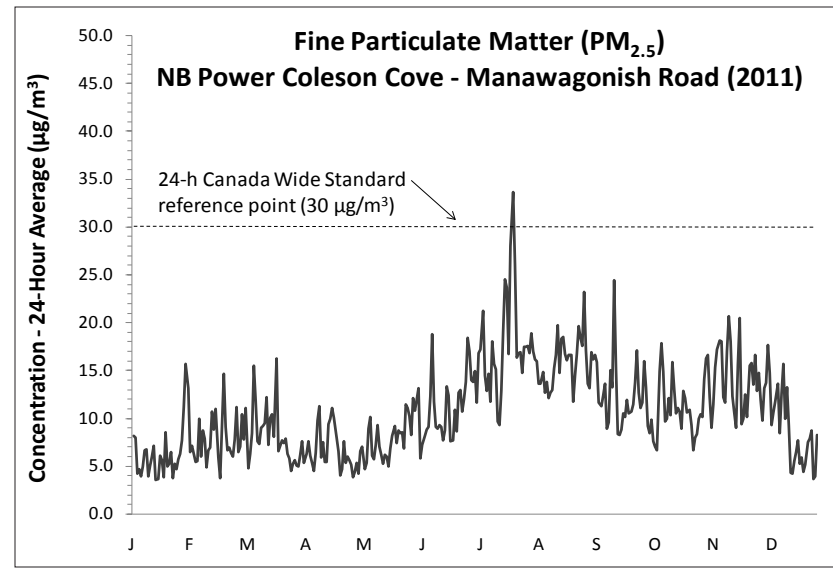
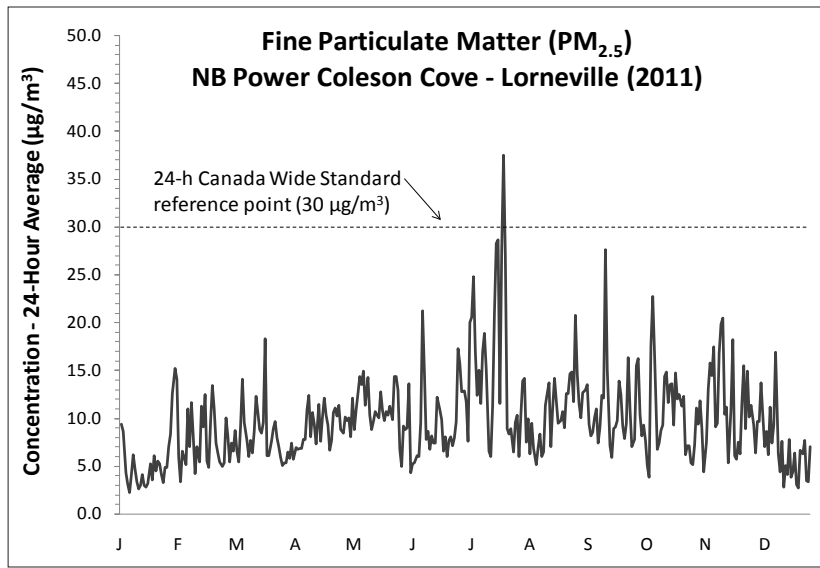
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Millbank - Sulphur Dioxide



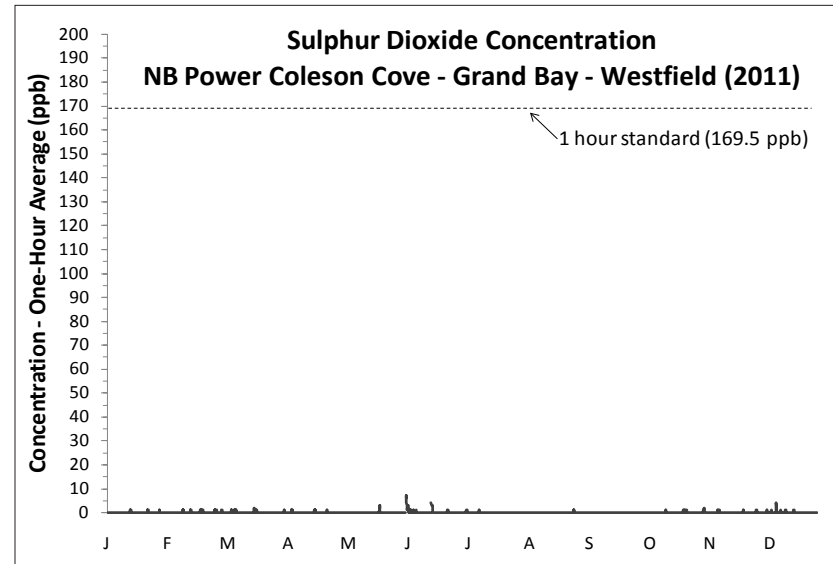
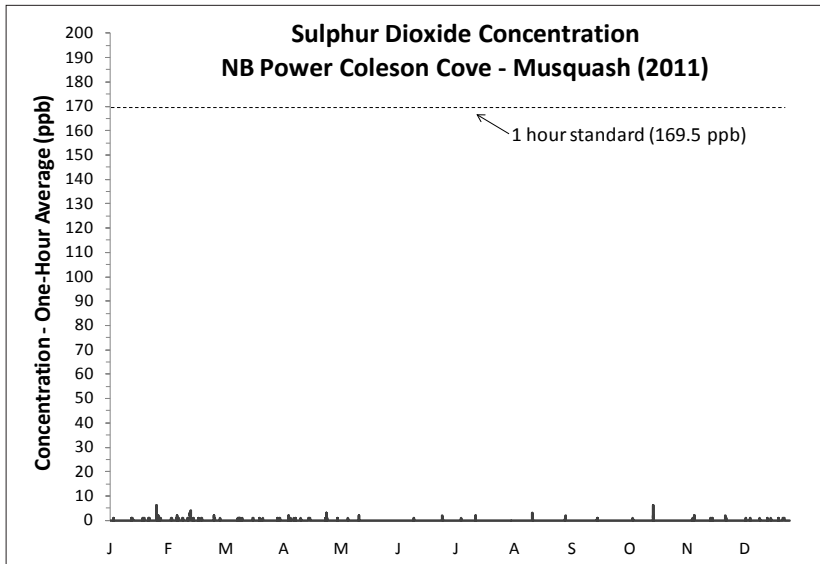
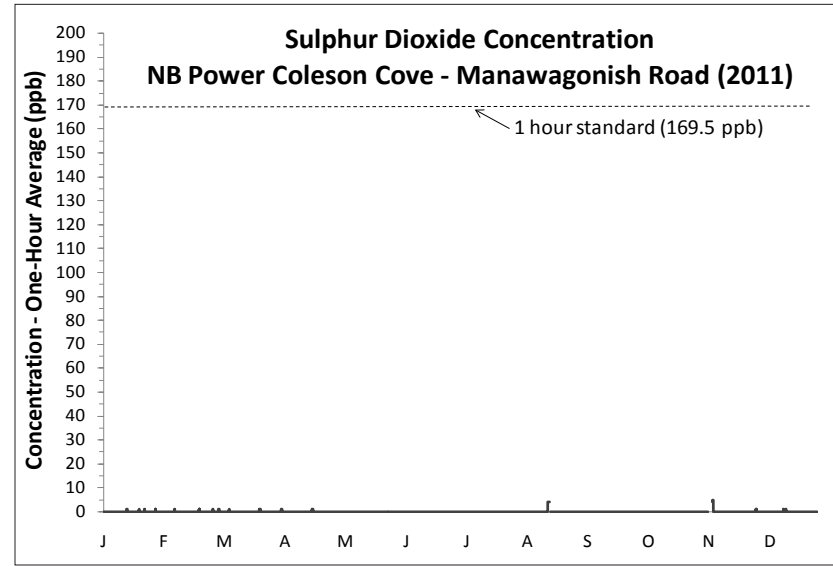
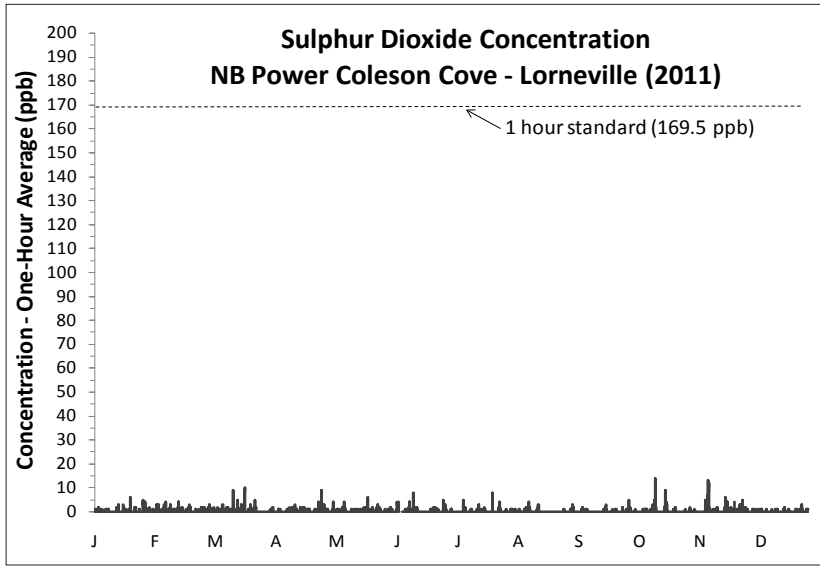
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Millbank - Total Suspended Particulate



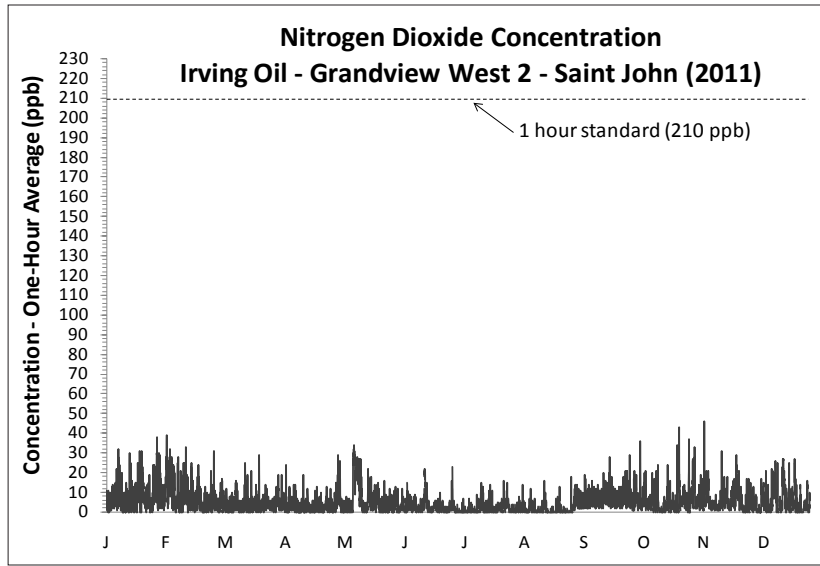
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Coleson Cove - Fine Particulate Matter



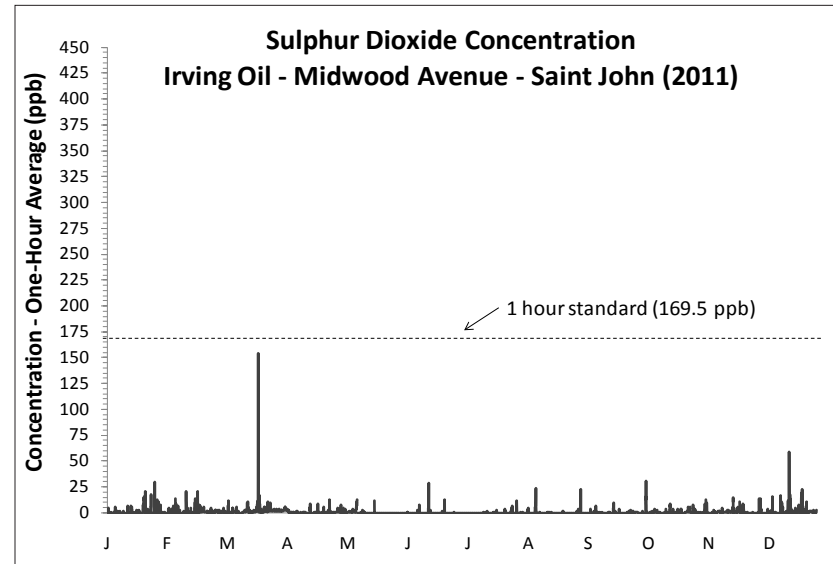
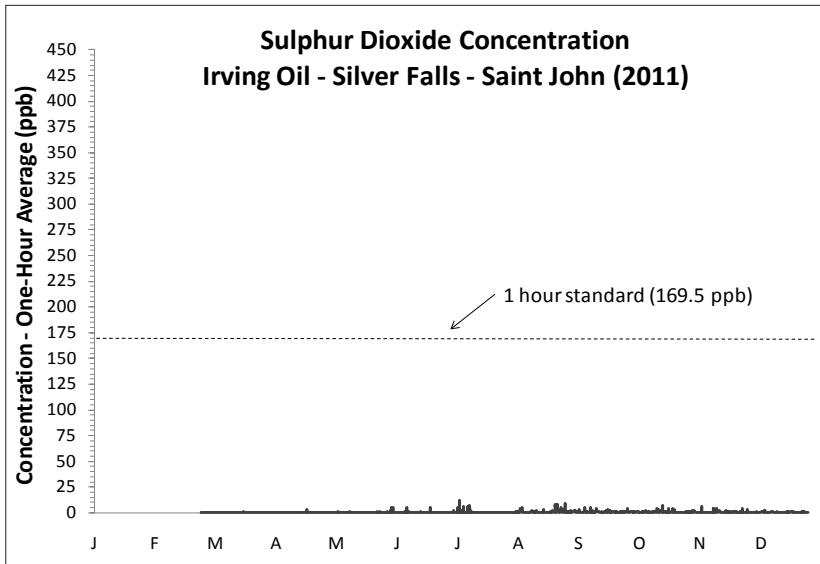
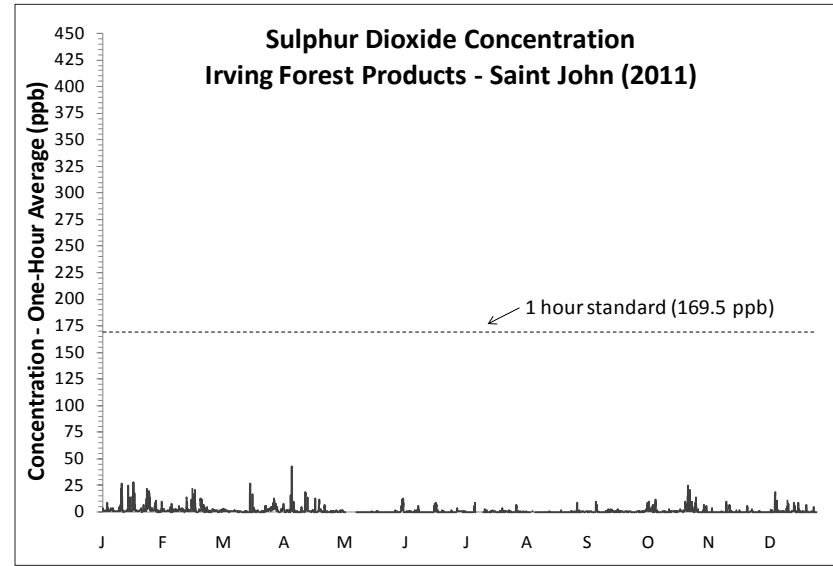
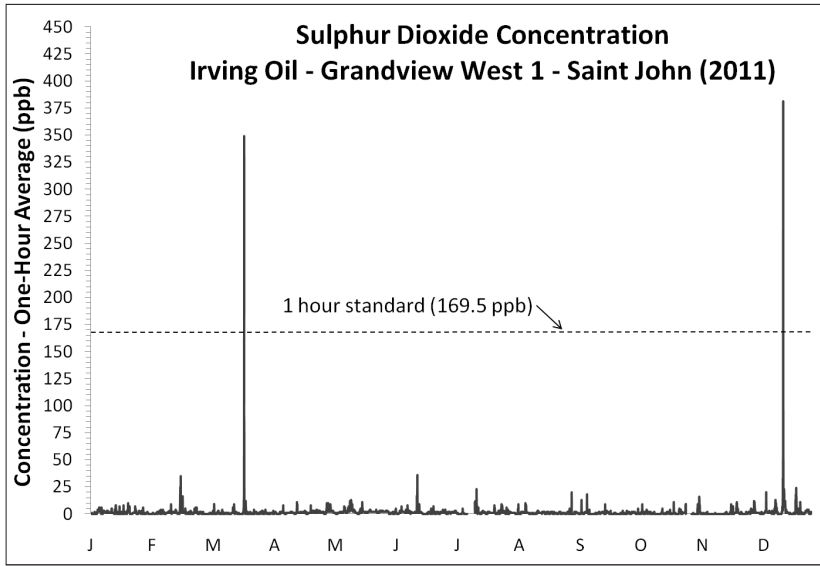
PART III: INDUSTRY-OPERATED NETWORKS - NB Power, Coleson Cove - Sulphur Dioxide



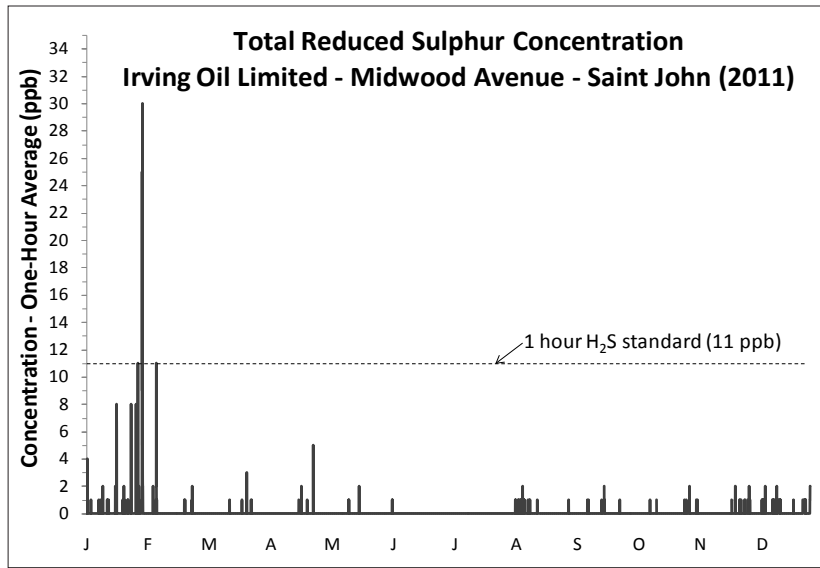
PART III: INDUSTRY-OPERATED NETWORKS - Irving Oil Ltd., Saint John - Nitrogen Dioxide



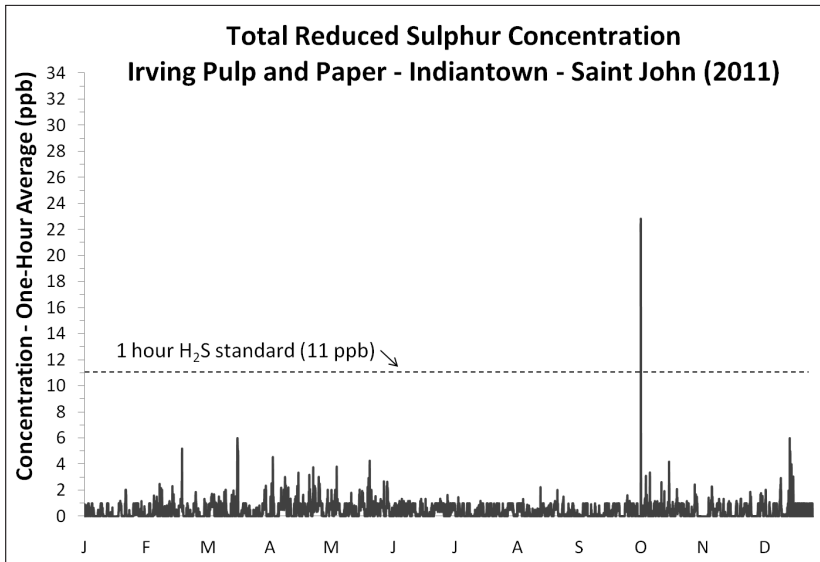
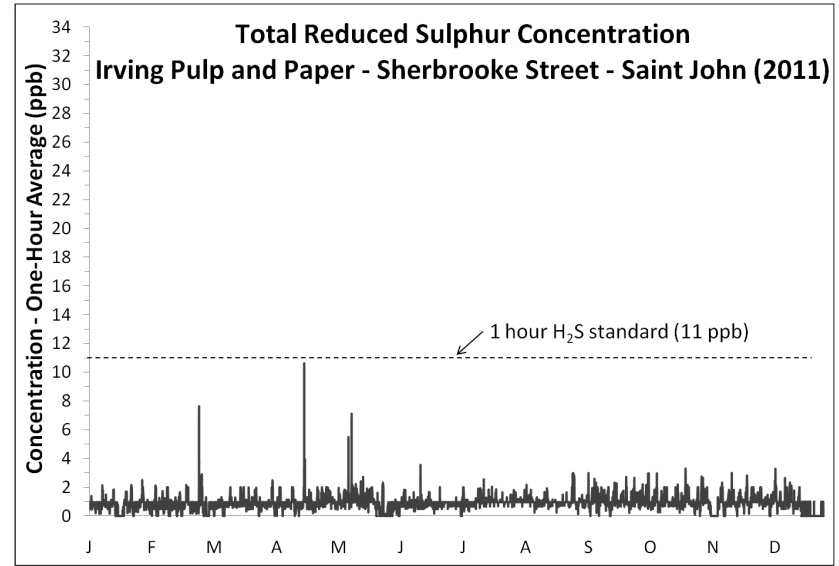
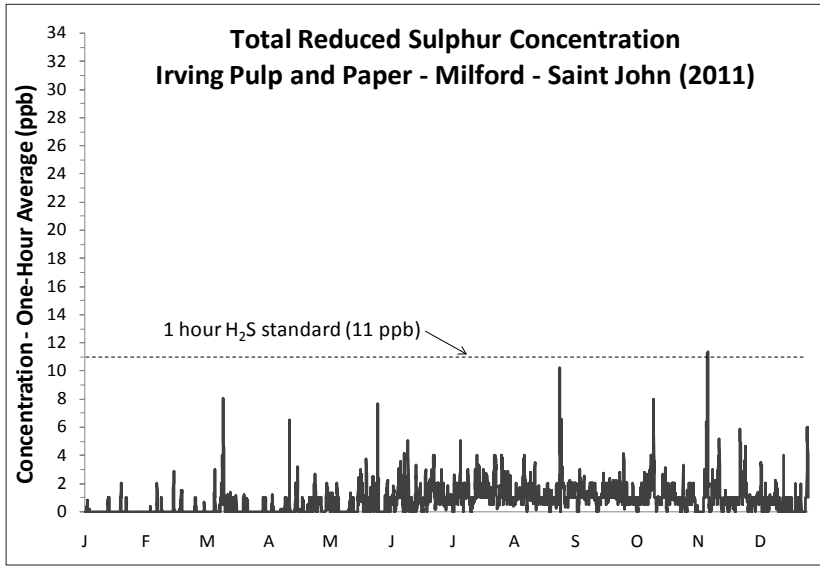
PART III: INDUSTRY-OPERATED NETWORKS - Irving Oil Ltd., Saint John - Sulphur Dioxide



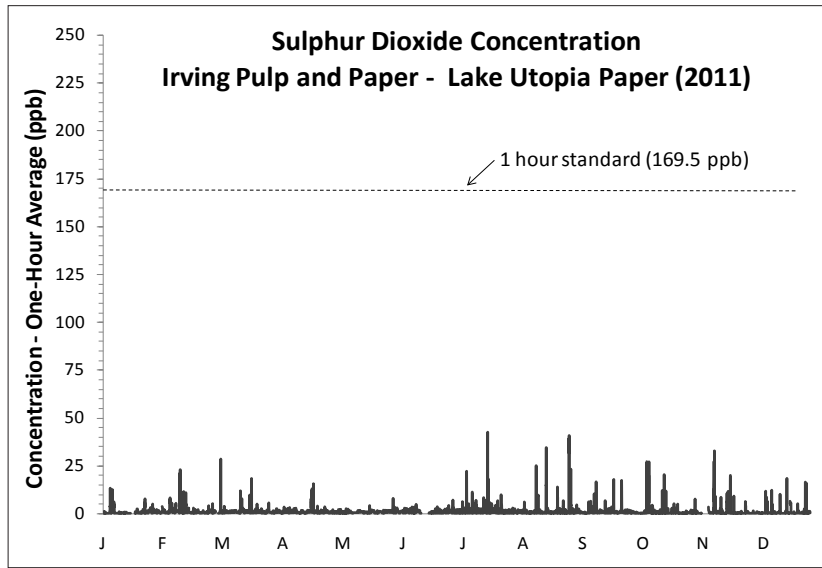
PART III: INDUSTRY-OPERATED NETWORKS - Irving Oil Ltd., Saint John - Total Reduced Sulphur



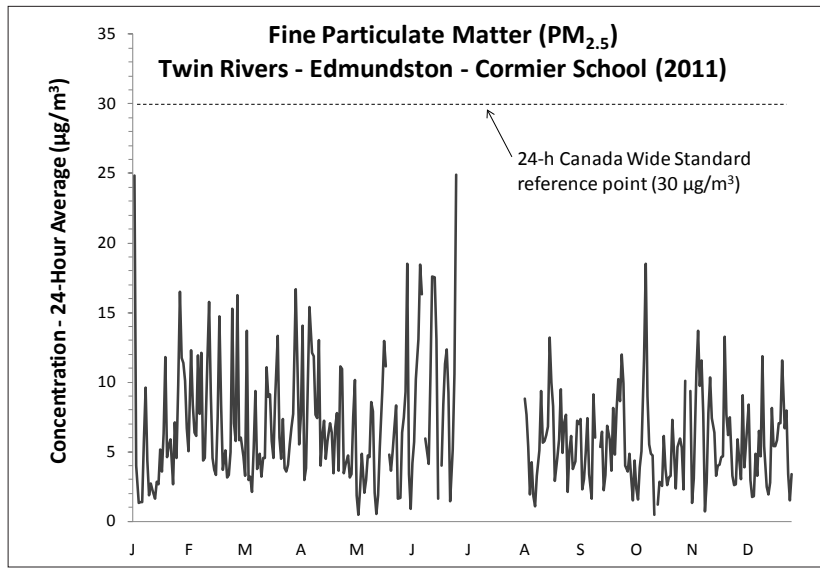
PART III: INDUSTRY-OPERATED NETWORKS - Irving Pulp and Paper, Saint John - Total Reduced Sulphur



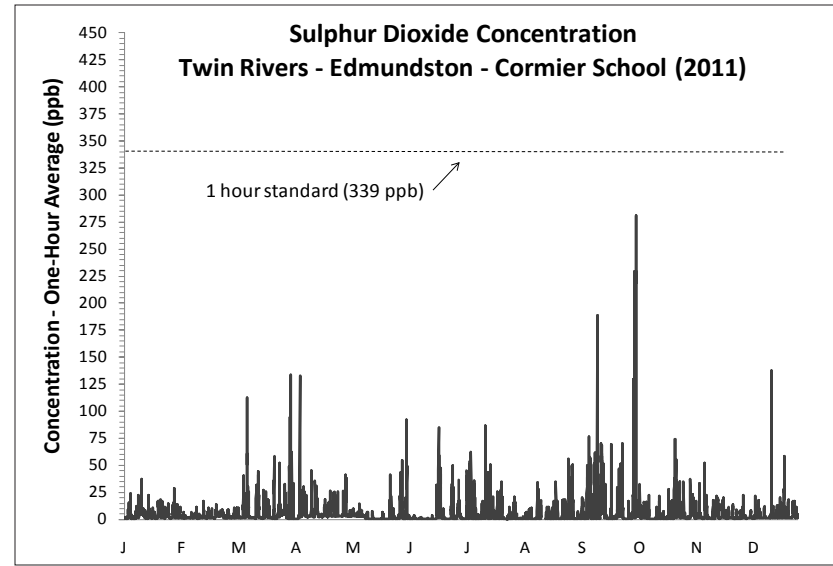
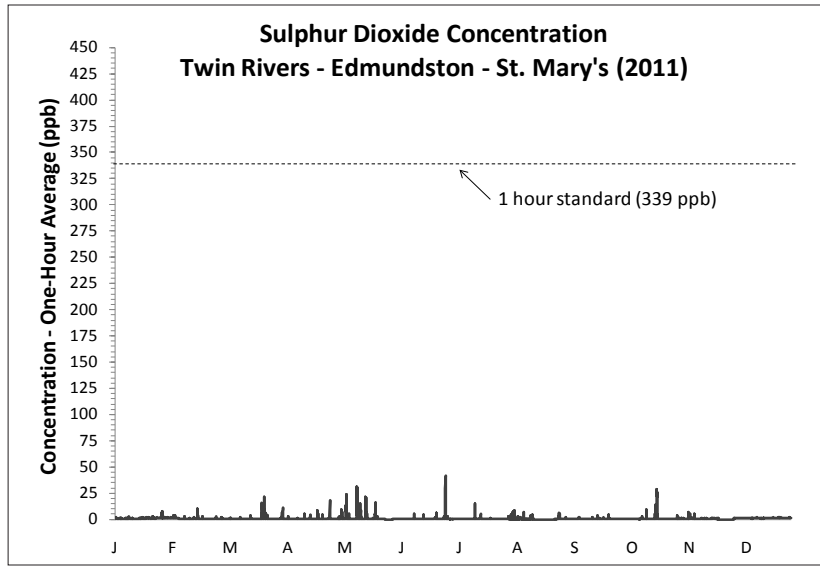
PART III: INDUSTRY-OPERATED NETWORKS - Irving Pulp and Paper, Lake Utopia - Sulphur Dioxide



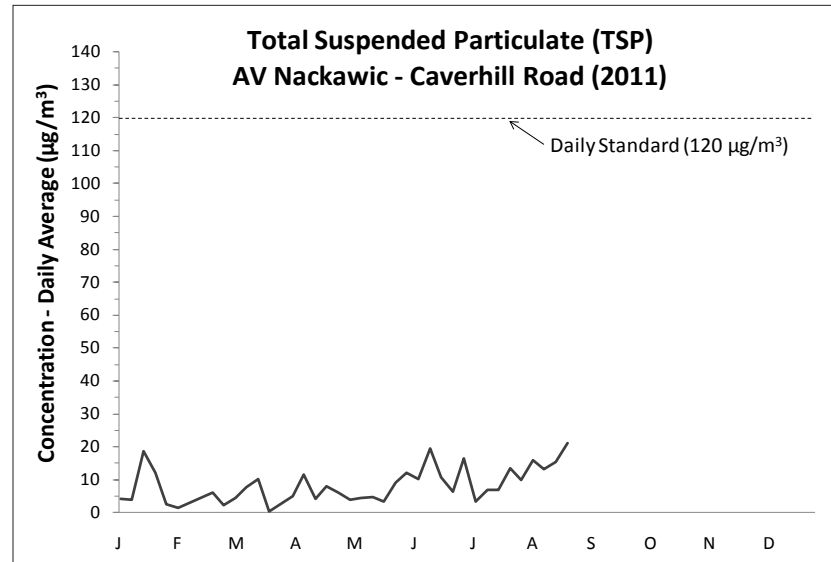
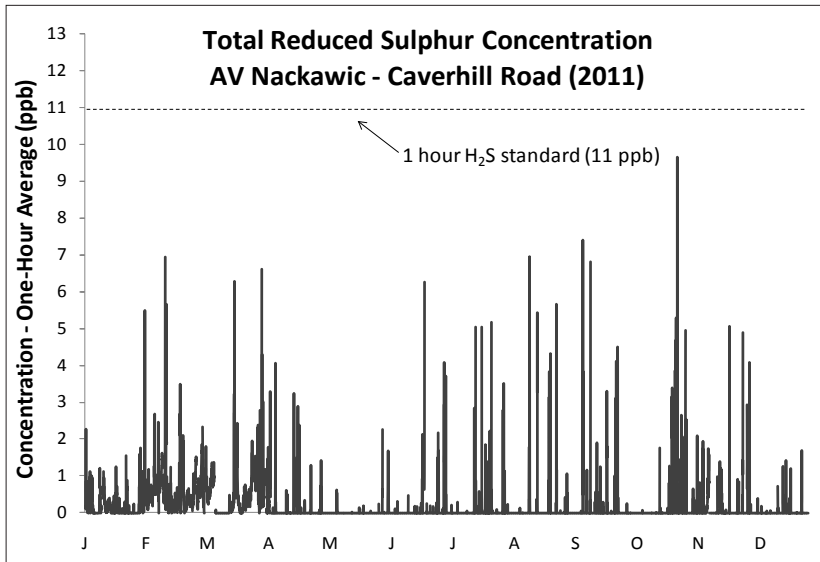
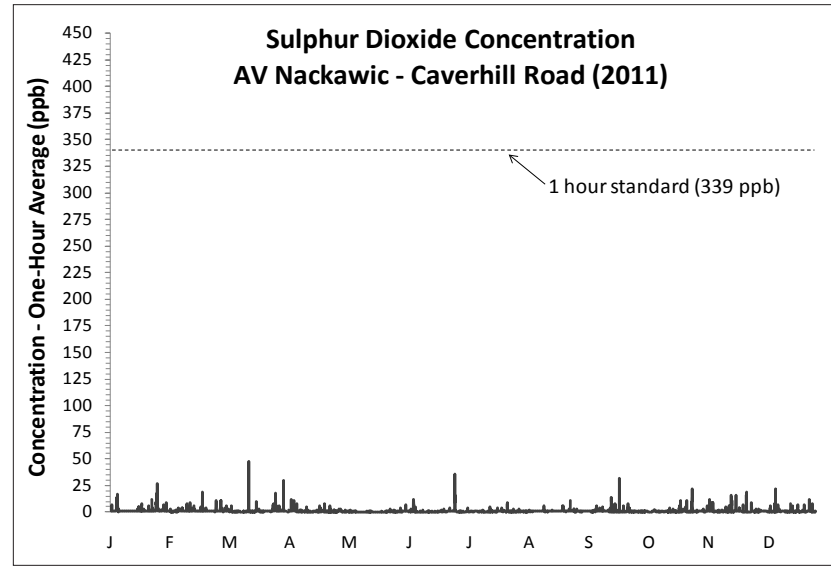
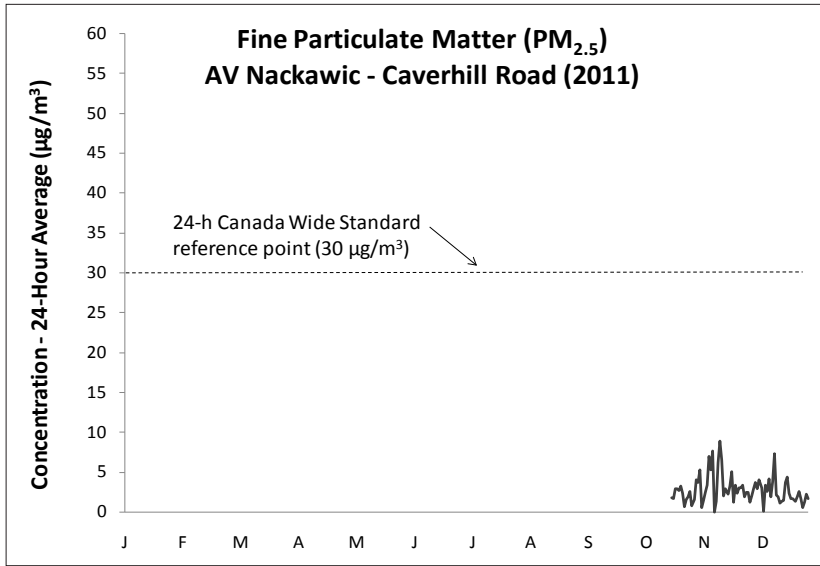
PART III: INDUSTRY-OPERATED NETWORKS - Twin Rivers Paper Company, Edmundston - Fine Particulate Matter



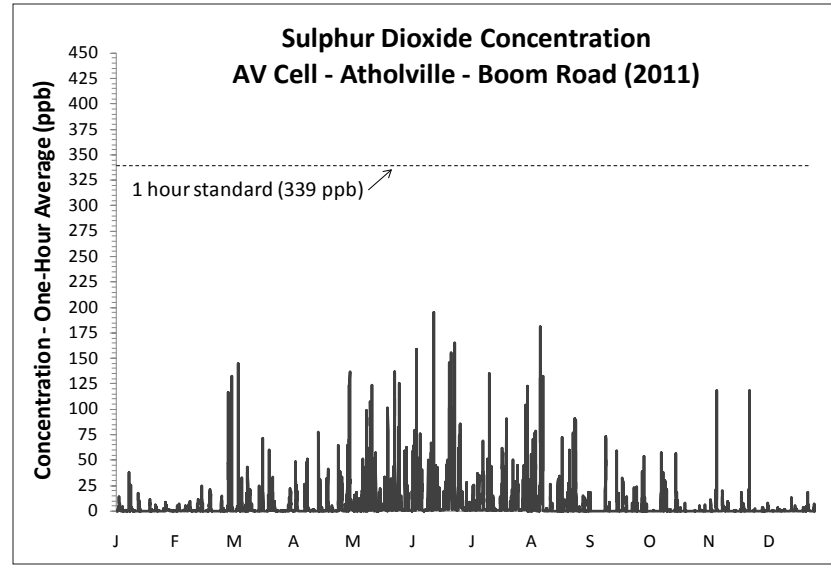
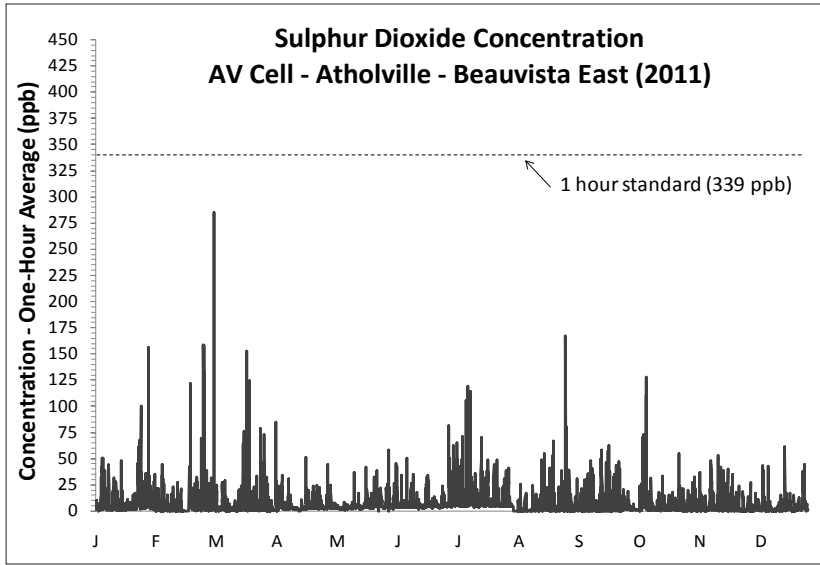
PART III: INDUSTRY-OPERATED NETWORKS - Twin Rivers Paper Company, Edmundston - Sulphur Dioxide



PART III: INDUSTRY-OPERATED NETWORKS - AV Nackawic, Nackawic - All Parameters



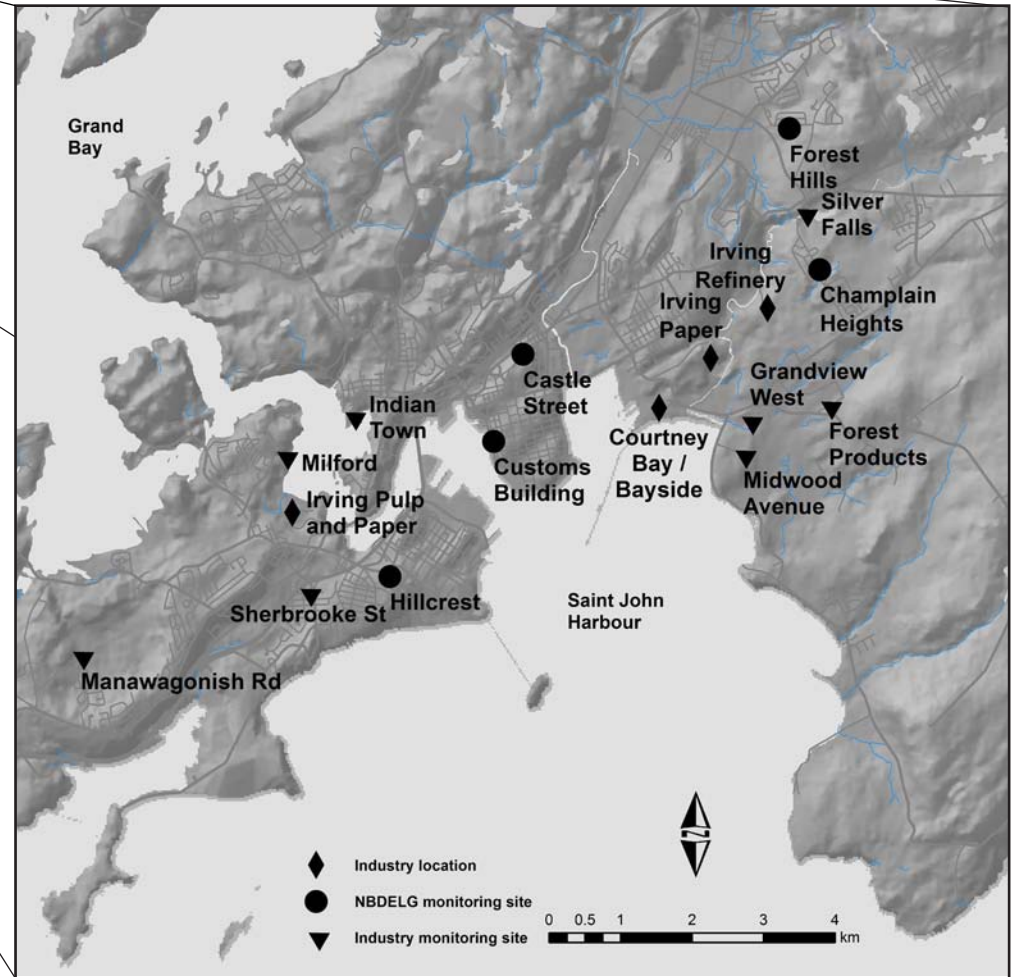
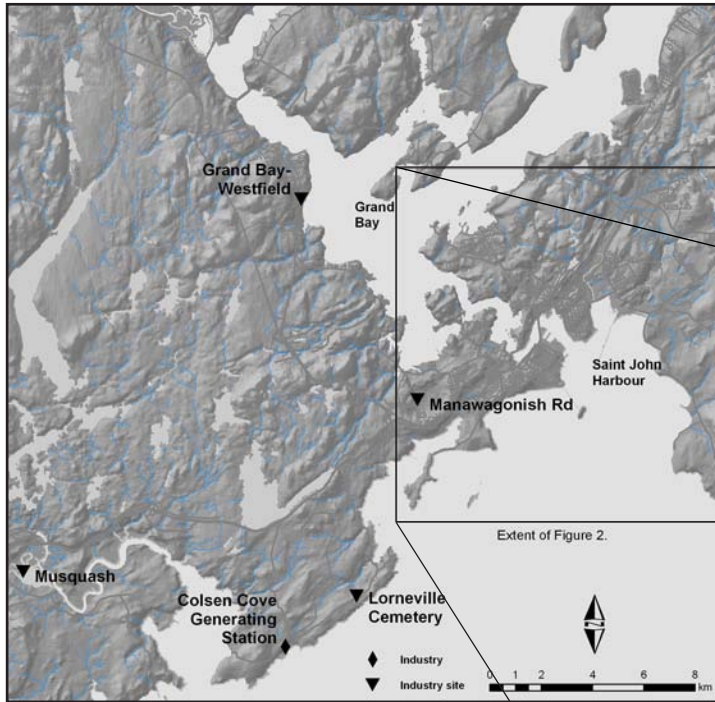
PART III: INDUSTRY-OPERATED NETWORKS - AV Cell, Atholville - Sulphur Dioxide



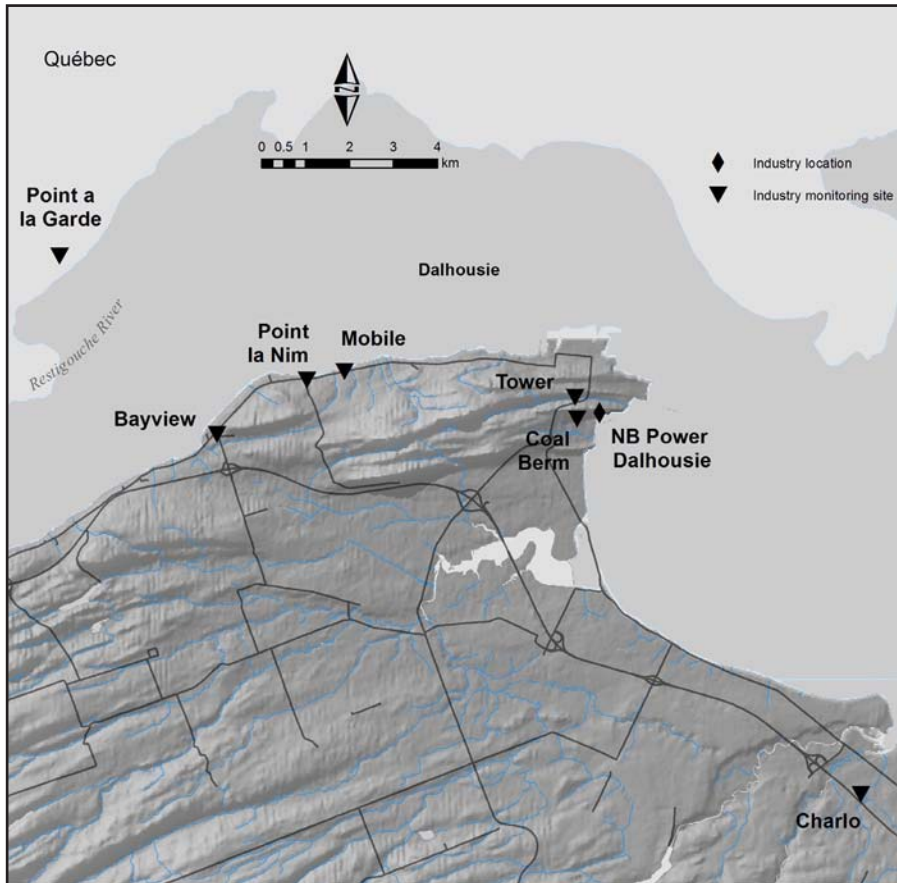
PART IV:
DETAILED STATION LOCATION MAPS

PART IV: DETAILED STATION LOCATION MAPS - Saint John Region

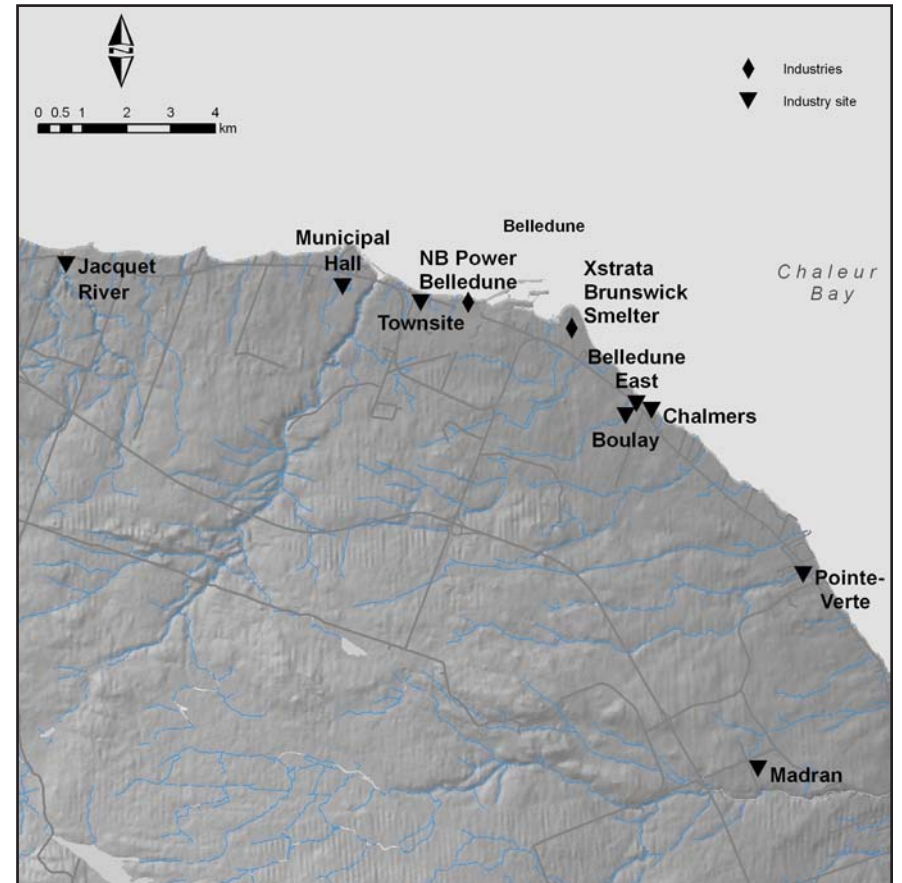
Grand Bay/Musquash/Saint John Area



PART IV: DETAILED STATION LOCATION MAPS - Dalhousie and Belledune

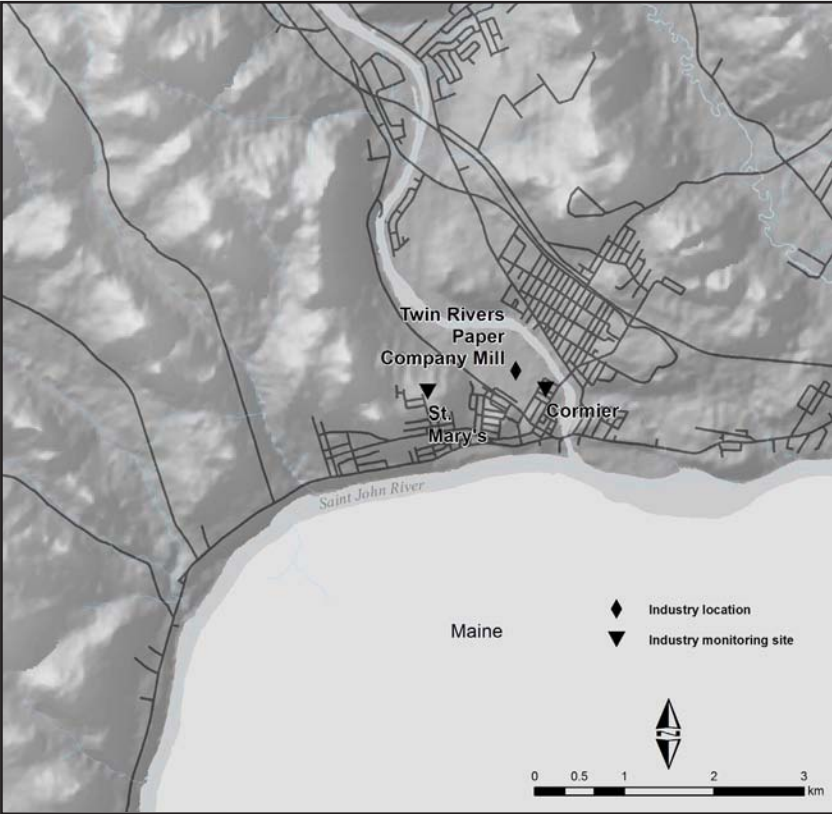


Dalhousie Area

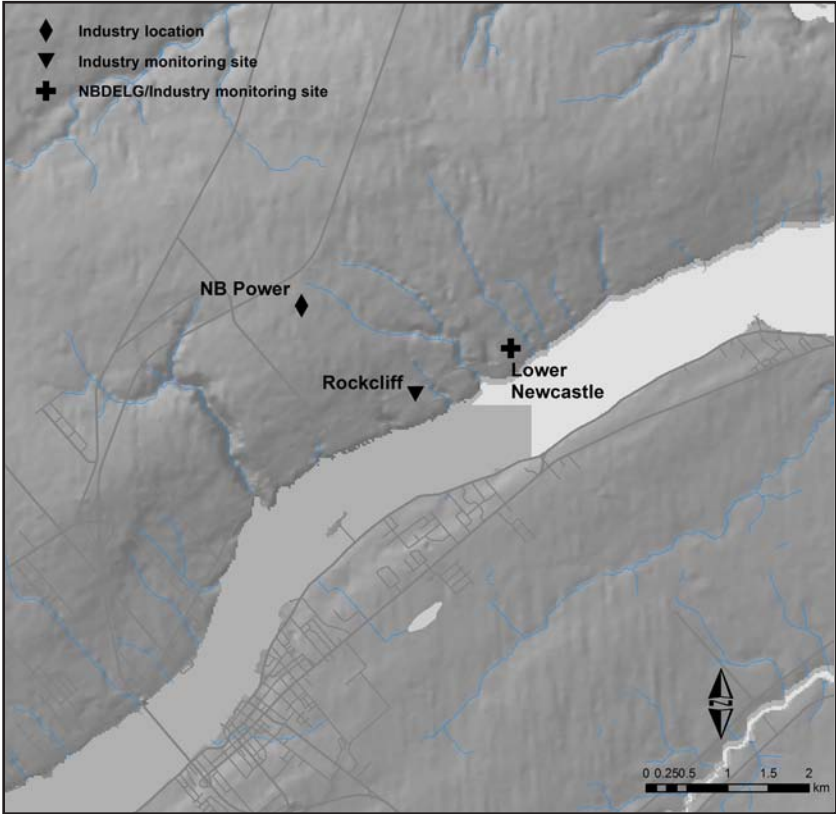


Belledune Area

PART IV: DETAILED STATION LOCATION MAPS - Edmundston and Lower Newcastle



Edmundston Area



Lower Newcastle