

WWF-CANADA

WATERSHED REPORT

MARITIME COASTAL WATERSHED



March 2016

MARITIME COASTAL BASIN WATERSHED REPORT

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SUMMARY

OVERALL WATERSHED HEALTH SCORING

Overall River Health	Indicator		Sub-Basin					Basin
			01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F – Cape Breton Island	
	Hydrology	Hydrology Health Category	Very Good	Very Good	Very Good	Very Good	Good	Very Good
		Hydrology Score	5	5	5	5	4	5
	Water Quality	Water Quality Health Category	Poor	Data deficient	Data deficient	Data deficient	Data deficient	Data deficient
		Water Quality Health Score	2	0	0	0	0	0
	Benthic Macro-Invertebrates	Benthic Health Category	Data Deficient	Very Good	Very Good	Good	Fair	Good
		Benthic Health Score	0	5	5	4	3	4
	Fish	Fish Health Category	Good	Data Deficient	Data Deficient	Good	Data Deficient	Data Deficient
		Fish Health Score	4	0	0	4	0	0
	Total Score		11	10	10	13	7	9
	Total Available Score		15	10	10	15	10	10
	Percentage of Maximum Score		73.3%	100.00%	100.00%	86.67%	70.00%	90.00%
	Overall Health Category		Good	Data deficient	Data deficient	Very Good	Data deficient	Data deficient

OVERALL DATA SUFFICIENCY SCORING

Overall Data Sufficiency	Indicator		Sub-Basin					Basin
			01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F – Cape Breton Island	
	Hydrology	Data Sufficiency Category	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient
		Data Sufficiency Score	1	1	1	1	1	1
	Water Quality	Data Sufficiency Category	Partially Sufficient	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient
		Data Sufficiency Score	1	0	0	0	0	0
	Benthic Macro-Invertebrates	Data Sufficiency Category	Insufficient	Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient
		Data Sufficiency Score	0	3	1	1	1	1
	Fish	Data Sufficiency Category	Partially Sufficient	Insufficient	Insufficient	Partially Sufficient	Insufficient	Insufficient
		Data Sufficiency Score	1	0	0	1	0	0
	Total Score		3	4	2	3	2	2
	Total Available Score		12	9	9	12	9	9
	Percentage of Maximum Score		25%	44.4%	22.2%	33.3%	22.2%	22.2%
	Overall Data Sufficiency Category		Partially Sufficient	Insufficient	Insufficient	Partially Sufficient	Insufficient	Insufficient

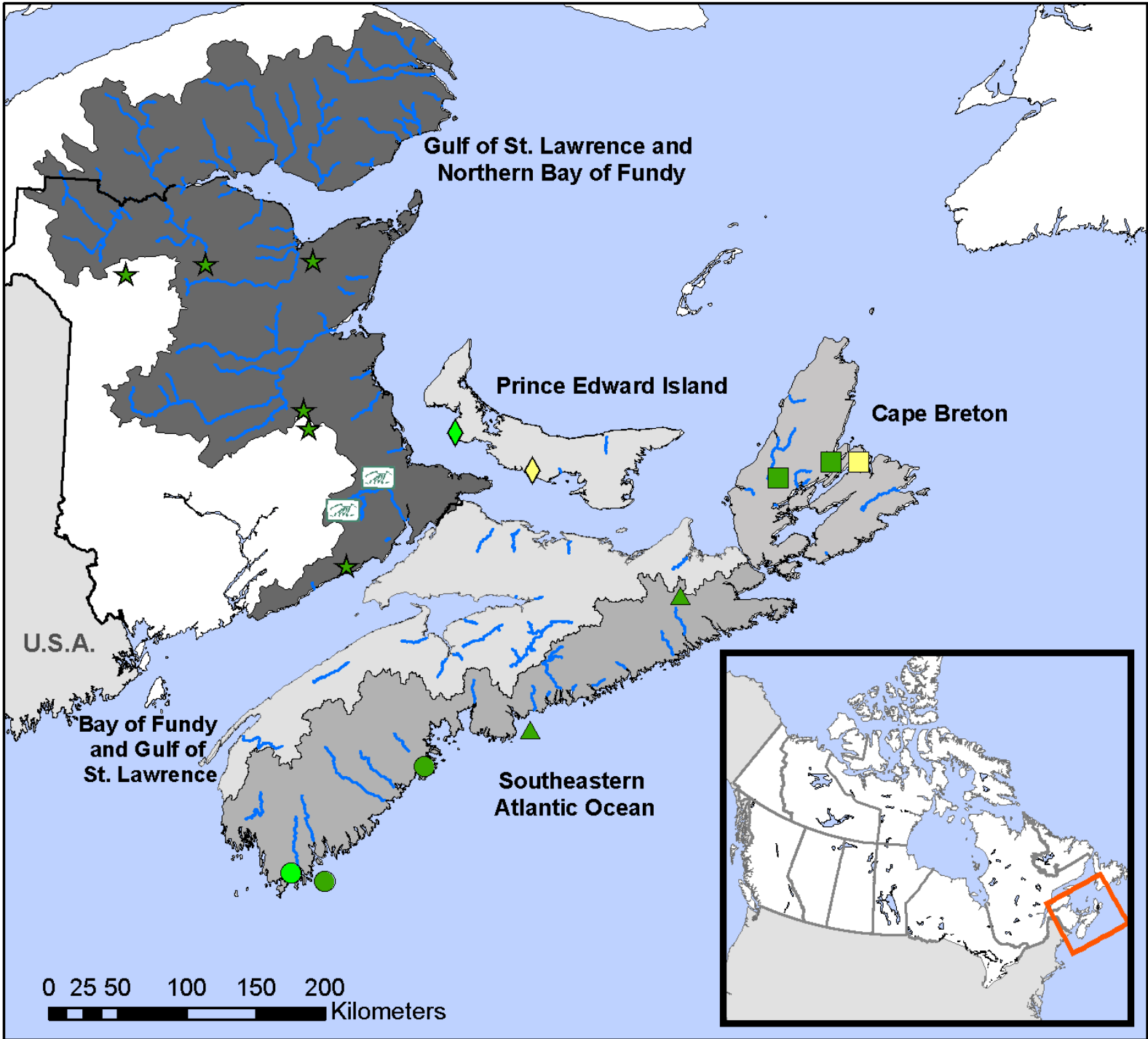
OVERALL HYDROLOGY WATERSHED HEALTH SCORING

				Sub-Basin					Basin	
Indicator				01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F – Cape Breton Island		
Hydrology	Long-Term Trends in Monthly Flow	Average percentage change in median monthly flow, measured as the relative change in median monthly flow per year, reported as an average across studied stations and weighted by the median annual flow per station.	Period of Study	1951-2013	1961-2012	1921-2012	1921-2013	1921-2014	1910-2012	
			Number of Stations	6	2	2	3	4	17	
			Value	0.00	0.24	0.00	0.07	0.26	0.02	
			Health Category	Very Good	Good	Good	Very Good	Good	Very Good	
			Health Score	5	4	4	5	4	5	
	Recent-Term Trends in Monthly Flow	Average percentage change in median monthly flow, measured as the relative change in median monthly flow per year, reported as an average across studied stations and weighted by the median annual flow per station.	Period of Study	1981-2012	1967-2012	1983-2012	1983-2013	1978-2014	1976-2012	
			Number of Stations	16	4	6	9	6	41	
			Value	0.56	0.02	0.02	0.00	0.00	0.02	
			Health Category	Good	Very Good	Very Good	Very Good	Very Good	Very Good	
			Health Score	4	5	5	5	5	5	
	Long-Term Trends in Annual Flow	Average percentage change in median annual flow, reported as an average across studied stations and weighted by the median annual flow per station.	Period of Study	1962-2012	1961-2012	1921-2012	1929-2013	1960-2014	1921-2014	
			Number of Stations	6	2	2	3	4	17	
			Value	0.00%	0.20%	0.00%	0.10%	0.30%	0.02%	
			Health Category	Very Good	Good	Very Good	Good	Good	Very Good	
			Health Score	5	5	5	5	4	5	
	Pre- vs. Post-Dam or Recent vs. Historical Analysis of Monthly Flow	Percentage of total months, for all stations analyzed, with significantly different variance in monthly flow pre- vs. post-dam operation or for historical vs. recent time periods in undammed systems.	Period of Study	1962-2012	1961-2012	1921-2012	1929-2013	1960-2014	1921-2014	
			Number of Stations	5	2	2	4	4	17	
			Value	3.00%	0.00%	0.00%	6.00%	62.50%	14.3%	
			Health Category	Very Good	Very Good	Very Good	Good	Very Poor	Very Good	
			Health Score	5	5	5	4	4	5	
			Percentage change in median monthly flow pre- and post-dam or for historical vs. recent time periods in undammed systems, averaged across studied stations by mean annual flow.	Period of Study	1962-2012	1961-2012	1921-2012	1929-2013	1960-2014	1921-2014
				Number of Stations	5	2	2	4	4	17
				Value	7.51%	2.51%	5.77%	11.32%	18.79%	9.18%
				Health Category	Very Good	Very Good	Very Good	Good	Good	Very Good
				Health Score	5	5	5	4	4	5
	Hydrology Score			Total Score	24	24	24	23	21	25
				Maximum Available Score	25	25	25	25	25	25
				Percentage of Maximum Score	96.0%	96.0%	96.0%	92.0%	84.0%	100.0%
				Hydrology Health Category	Very Good	Very Good	Very Good	Very Good	Good	Very Good
				Hydrology Score	5	5	5	5	4	5

			Sub-Basin				Basin
Data Sufficiency Indicator		01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F – Cape Breton Island	
Hydrology	Total number of sub-sub-basins	21	5	18	17	9	70
	Total number of dams (>10m)	2	0	0	0	0	0
	Year of earliest dam operation	1966	-	-	-	-	-
	Year of earliest available continuous flow monitoring	1951	1961	1921	1921	1921	1910
	Number of monitoring stations available for earliest, continuous flow monitoring	6	2	2	3	4	17
	Number of sub-sub-basins with monitoring stations	6	2	2	3	4	17
	Number of monitoring stations on river downstream of dams	-	-	-	-	-	-
	Data Sufficiency Category	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient
	Year of long-term continuous flow monitoring	1962	1961	1921	1929	1960	1921
	Number of monitoring stations available for continuous flow monitoring analysis	6	2	2	3	4	17
	Number of sub-sub-basins with monitoring stations	6	2	2	3	4	17
	Number of monitoring stations on river downstream of dams	2	-	-	-	-	-
	Data Sufficiency Category	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient
	Year of widespread, continuous flow monitoring	1981	1967	1983	1983	1982	1978
	Number of monitoring stations available for continuous flow monitoring analysis	16	4	6	9	6	41
	Number of sub-sub-basins with monitoring stations	14	4	6	9	5	38
	Number of monitoring stations on river downstream of dams	-	-	-	-	-	-
	Data Sufficiency Category	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient
	Overall Data Sufficiency Category	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient
	Data Sufficiency Score	1	1	1	1	1	1

MAP. RESULTS OF A SERIES OF LONG-TERM TREND ANALYSES OF MEDIAN MONTHLY FLOW IN THE MARITIME COASTAL BASIN FOR THE PERIOD 1912-2014.

Analysis of alteration of median monthly flow for monitoring stations in the Maritime Coastal basin (1921 - 2014)



Average percentage change in median monthly flow for all months, weighted by median annual flow

● 0-0.099 Very Good ● 0.101 - 0.99 Good ● 1.00-4.99 Fair ● 5.00-9.99 Poor ● 10.00-100.00 Very Poor



Dams

- ▲ 1921 - 2014
- 1929 - 2014
- 1960 - 2014
- ◆ 1961 - 2014
- ★ 1962 - 2014

Source:
Environment Canada, HYDAT, 2014;
Water Survey of Canada

TABLE. RESULTS OF LONG-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE GULF OF ST.LAWRENCE AND NORTHERN BAY OF FUNDY, NEW BRUNSWICK (01B) SUB-WATERSHED.

Maritime Coastal Watershed																				
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick																				
01BC001					01BE001				01BO001				01BP001				01BQ001			
Start Year for Analysis		1962			Start Year for Analysis		1921		Start Year for Analysis		1962		Start Year for Analysis		1952		Start Year for Analysis		1961	
Median Annual Flow (m³/s)		36.56			Median Annual Flow (m³/s)		19.90		Median Annual Flow (m³/s)		69.95		Median Annual Flow (m³/s)		18.86		Median Annual Flow (m³/s)		11.19	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.11	0.29	37.26		0.06	0.14	20.86		0.20	0.33	68.91		0.04	0.33	18.89		0.02	0.63	11.40	
November	0.11	0.29	37.54		0.07	0.08	20.67		0.21	0.37	69.21		0.05	0.28	19.06		0.02	0.63	11.81	
December	0.14	0.21	36.90		0.08	0.04 *	20.81	0.40	0.19	0.53	72.04		0.03	0.44	19.42		0.01	0.72	11.72	
January	0.16	0.21	37.09		0.04	0.23	20.12		0.44	0.12	71.81		0.10	0.05	19.44		0.10	0.07	11.84	
February	0.15	0.22	37.70		0.04	0.20	19.99		0.42	0.15	72.50		0.09	0.08	19.35		0.08	0.14	11.92	
March	0.15	0.27	37.75		0.05	0.15	19.91		0.33	0.23	73.20		0.06	0.22	19.09		0.06	0.20	11.46	
April	0.10	0.32	37.88		0.05	0.15	20.01		0.15	0.55	70.26		0.04	0.48	19.43		0.06	0.28	11.68	
May	0.04	0.76	37.94		0.05	0.15	20.59		0.10	0.70	71.17		0.03	0.48	19.61		0.06	0.31	11.59	
June	0.03	0.76	37.02		0.05	0.17	20.74		0.10	0.71	71.98		0.05	0.26	19.26		0.06	0.21	11.89	
July	2.84E-16	0.99	37.14		0.05	0.16	20.56		0.18	0.38	72.34		0.04	0.41	19.80		0.05	0.30	11.81	
August	0.01	0.92	37.10		0.05	0.21	20.84		0.18	0.44	71.58		0.04	0.39	19.57		0.05	0.23	11.91	
September	0.03	0.64	36.96		0.05	0.21	20.81		0.15	0.46	70.03		0.04	0.48	19.11		0.04	0.49	11.44	
Average for all months, for each station	0.09		37.36	0.00	0.06		20.49	0.03	0.22		71.25	0.00	0.05		19.34	0.00	0.05		11.71	0.00

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

Maritime Coastal Watershed				
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick				
01BU001				
Start Year for Analysis		1962		
Median Annual Flow (m³/s)		3.89		
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.02	0.27	3.80	
November	0.02	0.10	3.74	
December	0.02	0.13	3.87	
January	0.02	0.13	3.84	
February	0.02	0.13	3.99	
March	0.01	0.55	4.07	
April	0.01	0.35	4.21	
May	0.02	0.47	4.33	
June	0.01	0.49	4.18	
July	0.02	0.22	4.34	
August	0.02	0.24	4.14	
September	0.02	0.30	3.89	
Average for all months, for each station	0.02		4.03	0.00

*Average percentage change in median monthly flow for all months, weighted by median annual flow in the Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick (01B) wub-watershed	0.00
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* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

TABLE. RESULTS OF LONG-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE PRINCE EDWARD ISLAND (01C) SUB-WATERSHED.

Maritime Coastal Watershed								
01C - Prince Edward Island								
01CA003					01CB002			
Start Year for Analysis		1961			Start Year for Analysis		1961	
Median Annual Flow (m³/s)		0.52			Median Annual Flow (m³/s)		1.83	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.00	0.12	0.51		0.01	0.10	1.82	
November	0.00	0.14	0.52		0.01	0.08	1.83	
December	0.00	0.14	0.51		0.01	0.17	1.83	
January	0.00	0.11	0.53		0.01	0.02 *	1.87	0.500
February	0.00	0.08	0.52		0.01	0.01 *	1.86	0.560
March	0.00	0.21	0.52		0.01	0.01 *	1.88	0.638
April	0.00	0.16	0.54		0.01	0.02 *	1.88	0.544
May	0.00	0.46	0.55		0.01	0.04 *	1.87	0.483
June	0.00	0.95	0.54		0.01	0.06	1.88	
July	0.00	0.44	0.53		0.01	0.04 *	1.87	0.526
August	0.00	0.31	0.52		0.01	0.09	1.90	
September	0.00	0.11	0.52		0.01	0.05 *	1.82	0.514
Average for all months, for each station	0.00		0.53	0.00	0.01		1.86	0.31
Average percentage change in median monthly flow for all months, weighted by median annual flow			0.24					

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

TABLE. RESULTS OF LONG-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE BAY OF FUNDY AND GULF OF ST.LAWRENCE, NOVA SCOTIA (01D) SUB-WATERSHED.

Maritime Coastal Watershed								
01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia								
01DG003					01DR001			
Start Year for Analysis			1921		Start Year for Analysis		1921	
Median Annual Flow (m³/s)			1.76		Median Annual Flow (m³/s)		2.81	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.00	0.75	1.80		0.00	0.96	2.92	
November	0.00	0.59	1.87		0.00	0.89	3.11	
December	0.00	0.74	1.90		-0.01	0.51	3.13	
January	0.00	0.89	1.87		-0.01	0.30	2.96	
February	0.00	0.73	1.84		-0.01	0.43	3.03	
March	0.00	0.50	1.84		-0.01	0.39	2.98	
April	0.00	0.31	1.86		-0.01	0.58	3.04	
May	0.00	0.79	1.87		0.00	0.61	3.06	
June	0.00	0.76	1.83		-0.01	0.27	2.99	
July	0.00	0.91	1.83		0.00	0.68	2.95	
August	0.00	0.74	1.87		0.00	0.61	2.86	
September	0.00	0.87	1.81		0.00	0.58	2.93	
Average for all months, for each station	0.00		1.85	0.00	0.00		3.00	0.00
Average percentage change in median monthly flow for all months, weighted by median annual flow			0.24					

TABLE. RESULTS OF LONG-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE SOUTHEASTERN ATLANTIC OCEAN, NOVA SCOTIA (01E) SUB-WATERSHED.

01E - Southeastern Atlantic Ocean, Nova Scotia												
01EA003					01EC001				01EF001			
Start Year for Analysis		1929			Start Year for Analysis		1929		Start Year for Analysis		1929	
Median Annual Flow (m³/s)		27.29			Median Annual Flow (m³/s)		13.43		Median Annual Flow (m³/s)		24.31	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.06	0.20	27.65		0.02	0.21	13.59		0.03	0.52	24.74	
November	0.05	0.21	27.66		0.02	0.17	13.67		0.03	0.48	24.54	
December	0.06	0.19	27.68		0.02	0.20	13.63		0.03	0.43	24.41	
January	0.07	0.03 *	27.63	0.259	0.02	0.25	13.56		0.02	0.65	25.00	
February	0.08	0.03 *	27.62	0.274	0.02	0.29	13.72		0.01	0.76	25.20	
March	0.09	0.01 *	27.94	0.340	0.03	0.16	13.65		0.02	0.45	25.17	
April	0.10	0.01 *	28.31	0.344	0.03	0.12	13.51		0.03	0.49	25.30	
May	0.09	0.01 *	28.35	0.334	0.03	0.10	13.53		0.03	0.42	25.15	
June	0.10	0.02 *	28.11	0.339	0.02	0.16	13.58		0.03	0.41	24.73	
July	0.08	0.06	27.78		0.02	0.27	13.55		0.02	0.65	24.71	
August	0.06	0.10	27.56		0.02	0.30	13.64		0.01	0.74	24.94	
September	0.06	0.13	27.54		0.02	0.24	13.60		0.02	0.64	25.08	
Average for all months, for each station	0.08		27.82	0.16	0.02		13.60	0.00	0.02		24.91	0.00
Average percentage change in median monthly flow for all months, weighted by median annual flow in the Maritime Coastal			0.07									

TABLE. RESULTS OF LONG-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE CAPE BRETON ISLAND (01F) SUB-WATERSHED.

Maritime Coastal Watershed																
01F - Cape Breton Island																
01FB001					01FB003				01FC002				01FE002			
Start Year for Analysis		1960			Start Year for Analysis		1960		Start Year for Analysis		1960		Start Year for Analysis		1960	
Median Annual Flow (m³/s)		10.98			Median Annual Flow (m³/s)		12.10		Median Annual Flow (m³/s)		5.56		Median Annual Flow (m³/s)		4.79	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.04	0.24	11.45		0.01	0.86	12.08		-0.01	0.54	5.74		-0.08	0.00 ***	5.01	1.57
November	0.00	0.92	11.59		0.00	0.91	12.09		-0.01	0.58	6.13		-0.08	0.00 ***	5.46	1.52
December	0.00	0.95	11.72		0.02	0.41	12.11		0.00	0.99	6.67		-0.09	0.00 ***	5.19	1.67
January	-0.01	0.54	11.14		-0.01	0.47	12.19		-0.02	0.37	5.94		-0.10	0.00 ***	4.88	2.13
February	-0.03	0.23	11.18		-0.02	0.50	12.21		-0.02	0.29	5.69		-0.10	0.00 ***	4.85	2.09
March	-0.02	0.60	11.16		-0.01	0.65	12.35		-0.02	0.16	5.45		-0.11	0.00 ***	4.87	2.19
April	0.01	0.74	11.11		-0.01	0.83	12.36		-0.02	0.09	5.69		-0.10	0.00 ***	4.80	2.08
May	0.01	0.79	11.48		-0.02	0.53	12.19		-0.04	0.01 *	5.91	0.61	-0.09	0.00 ***	5.11	1.86
June	-0.02	0.53	11.43		-0.02	0.46	12.15		-0.03	0.07	5.83		-0.09	0.00 ***	5.15	1.71
July	-0.02	0.40	11.47		-0.02	0.40	12.25		-0.03	0.10	5.66		-0.09	0.00 ***	5.13	1.74
August	-0.01	0.80	11.53		-0.01	0.49	12.13		-0.02	0.23	5.96		-0.07	0.00 ***	4.97	1.48
September	0.03	0.28	11.39		-0.01	0.82	12.21		-0.01	0.49	5.67		-0.07	0.00 **	4.94	1.33
Average for all months, for each station	0.00		11.39	0.00	-0.01		12.19	0.00	-0.02		5.86	0.05	-0.09		5.03	1.78
Average percentage change in median monthly flow for all months, weighted by median annual flow			0.26													

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

MAP. RESULTS OF A SERIES OF TREND ANALYSES OF MEDIAN MONTHLY FLOW IN MARITIME COASTAL WATERSHED FOR THE PERIOD 1967-2014.

Analysis of alteration of median monthly flow for monitoring stations in the Maritime Coastal basin (1967 - 2014)

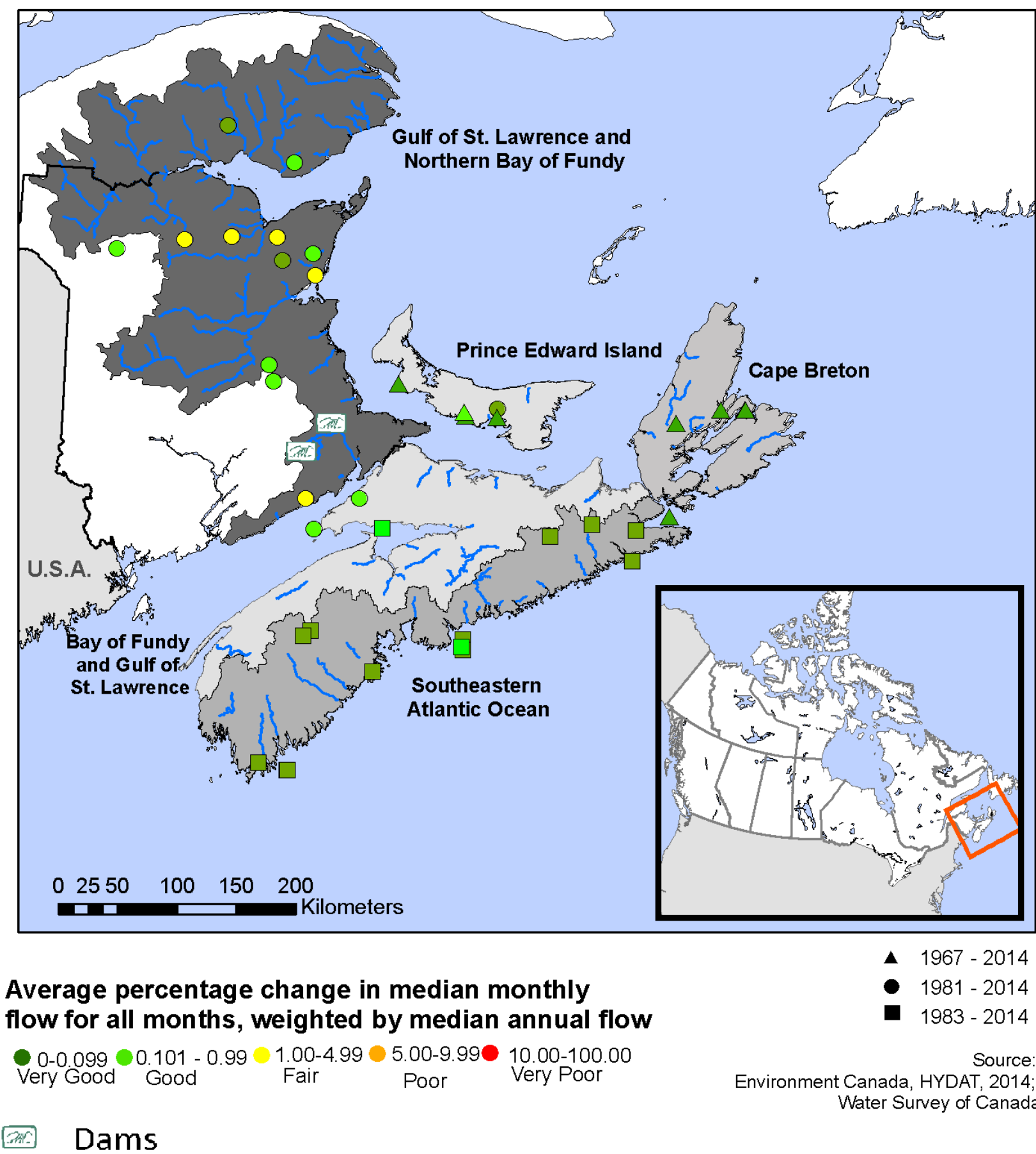


TABLE. RESULTS OF RECENT-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE GULF OF SAINT LAWRENCE AND NORTHERN BAY OF FUNDY, NEW BRUNSWICK (01B) SUB-WATERSHED.

01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick																				
01BC001					01BE001				01BG005				01BG009				01BC001			
Start Year for Analysis		1981			Start Year for Analysis		1981		Start Year for Analysis		1981		Start Year for Analysis		1981		Start Year for Analysis		1981	
Median Annual Flow (m³/s)		37.07			Median Annual Flow (m³/s)		20.50		Median Annual Flow (m³/s)		22.15		Median Annual Flow (m³/s)		20.58		Median Annual Flow (m³/s)		4.47	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.39	0.07	37.50		0.40	0.01 **	21.13	1.87	-0.12	0.25	21.91		0.17	0.25	20.16		0.11	0.00 **	4.46	2.38
November	0.46	0.10	38.20		0.47	0.01 **	21.62	2.16	-0.08	0.63	21.93		0.19	0.28	20.69		0.10	0.00 **	4.45	2.29
December	0.46	0.06	37.78		0.47	0.01 *	22.00	2.15	-0.07	0.63	22.84		0.15	0.35	21.15		0.11	0.00 **	4.49	2.43
January	0.64	0.01 *	38.62	1.65	0.40	0.01 **	20.69	1.91	0.07	0.59	23.33		0.25	0.02 *	21.19	1.17	0.12	0.00 **	4.77	2.51
February	0.63	0.02 *	39.41	1.60	0.36	0.01 *	20.68	1.75	0.02	0.81	23.28		0.25	0.04 *	20.98	1.19	0.11	0.02 *	4.75	2.22
March	0.58	0.02 *	38.87	1.49	0.37	0.01 **	20.25	1.83	-0.05	0.70	23.00		0.21	0.07	20.73		0.11	0.02 *	4.82	2.33
April	0.58	0.02 *	38.32	1.50	0.42	0.01 **	20.26	2.07	0.04	0.68	22.77		0.19	0.14	20.58		0.12	0.01 *	4.74	2.59
May	0.40	0.11	38.03		0.41	0.01 **	21.06	1.94	0.10	0.50	23.05		0.19	0.10	20.69		0.11	0.01 **	4.65	2.35
June	0.39	0.16	37.27		0.42	0.01 *	20.66	2.03	0.06	0.71	23.57		0.14	0.20	20.69		0.10	0.01 *	4.45	2.16
July	0.20	0.41	37.04		0.38	0.01 *	20.41	1.84	0.01	0.92	22.94		0.15	0.31	20.90		0.10	0.03 *	4.65	2.10
August	0.27	0.23	36.57		0.34	0.03 *	21.06	1.61	-0.01	0.95	22.19		0.13	0.32	20.91		0.11	0.01 **	4.65	2.39
September	0.38	0.15	36.79		0.36	0.01 *	20.97	1.69	-0.10	0.50	22.08		0.13	0.29	20.56		0.10	0.01 **	4.50	2.18
Average for all months, for each station	0.45		37.87	0.52	0.40		20.90	1.91	-0.01		22.74	0.00	0.18		20.77	0.20	0.11		4.61	2.33

	01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick																			
	01BJ007				01BJ010				01BL002				01BL003				01BO001			
	Start Year for Analysis		1981		Start Year for Analysis		1981		Start Year for Analysis		1981		Start Year for Analysis		1981		Start Year for Analysis		1981	
	Median Annual Flow (m³/s)		1.73		Median Annual Flow (m³/s)		2.05		Median Annual Flow (m³/s)		4.73		Median Annual Flow (m³/s)		68.97		Median Annual Flow (m³/s)		1.73	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.03	0.01 *	1.71	1.99	0.03	0.01 *	2.02	1.62	0.07	0.01 **	4.66	1.52	0.92	0.02 *	66.54	1.39	0.03	0.01 *	1.71	1.99
November	0.04	0.01 **	1.77	2.16	0.03	0.03 *	2.09	1.36	0.07	0.01 *	4.66	1.56	0.75	0.06	67.27		0.04	0.01 **	1.77	2.16
December	0.03	0.03 *	1.82	1.76	0.03	0.01 *	2.09	1.33	0.07	0.05 *	4.74	1.55	0.82	0.12	69.81		0.03	0.03 *	1.82	1.76
January	0.05	0.03 *	2.02	2.25	0.03	0.05	2.18		0.07	0.08	5.03		1.51	0.02 *	73.97	2.04	0.05	0.03 *	2.02	2.25
February	0.04	0.06	1.98		0.03	0.07	2.19		0.08	0.09	5.03		1.55	0.04 *	75.42	2.05	0.04	0.06	1.98	
March	0.04	0.02 *	1.95	2.08	0.03	0.10	2.14		0.08	0.09	4.98		1.37	0.05	74.51		0.04	0.02 *	1.95	2.08
April	0.05	0.01 *	1.86	2.50	0.03	0.07	2.09		0.07	0.05 *	4.83	1.52	1.20	0.04 *	68.83	1.74	0.05	0.01 *	1.86	2.50
May	0.04	0.01 **	1.79	2.22	0.03	0.04 *	2.06	1.43	0.08	0.02 *	4.85	1.58	1.08	0.05 *	68.31	1.57	0.04	0.01 **	1.79	2.22
June	0.04	0.01 **	1.81	2.00	0.03	0.03 *	2.01	1.37	0.07	0.03 *	4.85	1.52	1.01	0.08	69.03		0.04	0.01 **	1.81	2.00
July	0.04	0.01 *	1.84	2.13	0.03	0.06	2.09		0.06	0.06	4.87		0.75	0.11	70.62		0.04	0.01 *	1.84	2.13
August	0.04	0.01 *	1.78	2.25	0.04	0.01 *	2.07	1.72	0.08	0.01 *	4.80	1.62	0.82	0.06	69.33		0.04	0.01 *	1.78	2.25
September	0.04	0.00 **	1.66	2.58	0.03	0.02 *	2.04	1.69	0.07	0.02 *	4.63	1.50	0.81	0.02 *	67.02	1.21	0.04	0.00 **	1.66	2.58
Average for all months, for each station	0.04		1.83	1.99	0.03		2.09	0.88	0.07		4.83	1.03	1.05		70.05	0.83	0.04		1.83	1.99

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick																				
01BP001					01BQ001				01BS001				01BU002				01BU003			
Start Year for Analysis		1981			Start Year for Analysis		1981		Start Year for Analysis		1981		Start Year for Analysis		1981		Start Year for Analysis		1981	
Median Annual Flow (m³/s)		19.07			Median Annual Flow (m³/s)		11.16		Median Annual Flow (m³/s)		1.59		Median Annual Flow (m³/s)		3.79		Median Annual Flow (m³/s)		1.87	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.20	0.07	18.37		0.17	0.02 *	2.02	1.62	0.01	0.27	1.61		0.06	0.11	3.71		0.04	0.06	1.87	
November	0.18	0.13	19.50		0.18	0.02 *	2.09	1.36	0.02	0.26	1.59		0.08	0.01 **	3.74	2.08	0.03	0.12	1.80	
December	0.23	0.07	19.44		0.16	0.05	2.09	1.33	0.02	0.23	1.58		0.08	0.02 *	3.91	1.94	0.03	0.08	1.86	
January	0.35	0.05 *	20.78	1.68	0.30	0.02 *	2.18		0.03	0.06	1.67		0.08	0.06	3.96		0.04	0.06	1.92	
February	0.33	0.05 *	20.42	1.63	0.25	0.02 *	2.19		0.03	0.07	1.65		0.08	0.05 *	4.02	1.91	0.03	0.10	1.89	
March	0.26	0.13	19.48		0.24	0.01 *	2.14		0.03	0.11	1.64		0.06	0.22	4.00		0.02	0.34	1.98	
April	0.28	0.06	19.28		0.24	0.01 *	2.09		0.03	0.10	1.62		0.11	0.01 *	4.05	2.69	0.02	0.36	2.00	
May	0.26	0.05	19.07		0.26	0.01 **	2.06	1.43	0.04	0.06	1.77		0.11	0.01 **	4.10	2.62	0.02	0.17	2.00	
June	0.24	0.06	19.11		0.30	0.00 **	2.01	1.37	0.02	0.42	1.77		0.07	0.08	3.93		0.02	0.26	1.93	
July	0.22	0.19	19.54		0.22	0.01 *	2.09		0.02	0.27	1.82		0.10	0.02 *	4.31	2.21	0.02	0.12	1.97	
August	0.26	0.08	19.16		0.23	0.00 **	2.07	1.72	0.03	0.13	1.74		0.09	0.03 *	4.10	2.19	0.03	0.05	1.92	
September	0.27	0.09	18.56		0.21	0.00 **	2.04	1.69	0.01	0.35	1.62		0.08	0.04 *	3.81	2.01	0.04	0.04 *	1.91	2.10
Average for all months, for each station	0.26		19.39	0.28	0.23		11.55	1.87	0.02		1.67	0.00	0.08		3.97	1.47	0.03		1.92	0.18

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick				
01BV006				
Start Year for Analysis		1981		
Median Annual Flow (m³/s)		2.86		
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.02	0.16	2.76	
November	0.04	0.13	2.89	
December	0.05	0.03 *	2.95	1.59
January	0.01	0.82	2.99	
February	0.02	0.37	2.97	
March	0.02	0.22	3.04	
April	0.01	0.71	3.03	
May	0.01	0.63	2.98	
June	0.01	0.59	2.93	
July	0.01	0.50	2.96	
August	0.03	0.07	2.90	
September	0.02	0.32	2.76	
Average for all months, for each station	0.02		2.93	0.13

Average percentage change in median monthly flow for all months, weighted by median annual flow in the Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick (01B) sub-watershed.	0.56
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* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

TABLE. RESULTS OF RECENT-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE PRINCE EDWARD ISLAND (01C) SUB-WATERSHED.

01C - Prince Edward Island																
01CA003					01CB002				01CB004				01CC002			
Start Year for Analysis		1967			Start Year for Analysis		1967		Start Year for Analysis		1967		Start Year for Analysis		1967	
Median Annual Flow (m³/s)		0.53			Median Annual Flow (m³/s)		1.88		Median Annual Flow (m³/s)		0.66		Median Annual Flow (m³/s)		0.45	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.00	0.57	0.53		0.01	0.17	1.86		0.00	0.05	0.65		0.00	0.48	0.44	
November	0.00	0.25	0.53		0.01	0.13	1.86		0.00	0.07	0.66		0.00	0.52	0.45	
December	0.00	0.44	0.53		0.01	0.18	1.86		0.00	0.09	0.66		0.00	0.32	0.46	
January	0.00	0.87	0.55		0.01	0.23	1.94		0.00	0.07	0.67		0.00	0.16	0.46	
February	0.00	0.79	0.55		0.01	0.16	1.92		0.00	0.10	0.67		0.00	0.20	0.46	
March	0.00	0.97	0.55		0.01	0.06	1.94		0.00	0.05	0.67		0.00	0.29	0.48	
April	0.00	0.85	0.56		0.01	0.11	1.93		0.00	0.04 *	0.66	0.65	0.00	0.41	0.46	
May	0.00	0.57	0.56		0.01	0.18	1.92		0.00	0.03 *	0.66	0.69	0.00	0.22	0.47	
June	0.00	0.85	0.55		0.01	0.22	1.93		0.00	0.09	0.66		0.00	0.15	0.46	
July	0.00	0.79	0.55		0.01	0.15	1.92		0.00	0.12	0.66		0.00	0.21	0.44	
August	0.00	0.70	0.54		0.01	0.18	1.94		0.00	0.08	0.66		0.00	0.21	0.44	
September	0.00	0.37	0.53		0.01	0.07	1.86		0.00	0.05	0.65		0.00	0.38	0.44	
Average for all months, for each station	0.00		0.54	0.00	0.01		1.91	0.00	0.00		0.66	0.11	0.00		0.46	0.00
Average percentage change in median monthly flow for all months, weighted by median annual flow in the Maritime Coastal (Prince Edward Island)		0.02														

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

TABLE. RESULTS OF RECENT-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE BAY OF FUNDY AND GULF OF SAINT LAWRENCE, NOVA SCOTIA (01D) SUB-WATERSHED.

01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia												
01DC005					01DC007				01DG003			
Start Year for Analysis		1983			Start Year for Analysis		1983		Start Year for Analysis		1983	
Median Annual Flow (m³/s)		8.22			Median Annual Flow (m³/s)		17.30		Median Annual Flow (m³/s)		1.71	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.13	0.07	8.28		0.24	0.10	17.02		0.01	0.55	1.66	
November	0.09	0.16	8.07		0.21	0.23	16.68		0.02	0.23	1.71	
December	0.11	0.10	8.34		0.20	0.12	16.26		0.02	0.13	1.82	
January	0.05	0.39	8.53		0.19	0.22	17.71		0.02	0.38	1.84	
February	0.02	0.76	8.74		0.15	0.35	18.45		0.01	0.38	1.83	
March	0.03	0.64	8.48		0.16	0.25	18.64		0.01	0.57	1.86	
April	0.05	0.27	8.58		0.18	0.12	18.52		0.01	0.71	1.89	
May	0.08	0.12	8.58		0.21	0.14	18.54		0.00	0.79	1.86	
June	0.07	0.24	8.34		0.21	0.11	17.66		0.00	0.70	1.82	
July	0.08	0.21	8.35		0.21	0.10	17.70		-0.01	0.31	1.80	
August	0.07	0.21	8.53		0.15	0.29	17.67		-0.01	0.62	1.77	
September	0.11	0.10	8.43		0.21	0.13	17.58		0.00	0.96	1.69	
Average for all months, for each station	0.07		8.44	0.00	0.20		17.70	0.00	0.01		1.80	0.00

* PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW IS ONLY CALCULATED FOR MONTHS WITH A STATISTICALLY SIGNIFICANT TREND OVER TIME. FOR MONTHS WITHOUT A SIGNIFICANT TREND, A VALUE OF ZERO IS ASSIGNED FOR CALCULATION OF THE OVERALL STATION SCORE.

01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia												
01DL001					01DP004				01DR001			
Start Year for Analysis		1983			Start Year for Analysis		1983		Start Year for Analysis		1983	
Median Annual Flow (m³/s)		0.96			Median Annual Flow (m³/s)		1.33		Median Annual Flow (m³/s)		2.71	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.02	0.04 *	0.90	2.04	0.02	0.18	1.40		0.01	0.48	2.83	
November	0.02	0.06	0.92		0.03	0.07	1.47		0.03	0.11	2.82	
December	0.02	0.06	1.06		0.02	0.08	1.43		0.02	0.21	2.83	
January	0.01	0.31	1.02		-0.01	0.37	1.34		-0.01	0.75	2.78	
February	0.01	0.11	1.06		-0.01	0.62	1.58		-0.01	0.48	2.92	
March	0.02	0.06	1.06		-0.01	0.59	1.47		-0.02	0.52	2.89	
April	0.01	0.18	1.03		0.00	0.69	1.42		0.00	0.94	2.89	
May	0.02	0.10	1.01		0.00	0.96	1.45		0.00	0.69	2.93	
June	0.01	0.08	0.97		0.01	0.51	1.36		-0.01	0.64	2.79	
July	0.01	0.24	0.99		0.00	0.89	1.36		-0.01	0.69	2.92	
August	0.02	0.04 *	0.99	1.76	0.01	0.37	1.39		0.00	0.89	2.80	
September	0.02	0.02 *	0.91	1.83	0.01	0.23	1.31		0.00	0.78	2.73	
Average for all months, for each station	0.01		0.99	0.47	0.01		1.42	0.00	0.00		2.84	0.00
Average percentage change in median monthly flow for all months, weighted by median annual flow in the Maritime Coastal (Bay of Fundy and Gulf of St. Lawrence, Nova Scotia)					0.02							

* PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW IS ONLY CALCULATED FOR MONTHS WITH A STATISTICALLY SIGNIFICANT TREND OVER TIME. FOR MONTHS WITHOUT A SIGNIFICANT TREND, A VALUE OF ZERO IS ASSIGNED FOR CALCULATION OF THE OVERALL STATION SCORE.

TABLE. RESULTS OF RECENT-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE SOUTHEASTERN ATLANTIC OCEAN, NOVA SCOTIA (01E) SUB-WATERSHED.

01E - Southeastern Atlantic Ocean, Nova Scotia												
01EA003					01EC001				01ED005			
Start Year for Analysis		1983			Start Year for Analysis		1983		Start Year for Analysis		1983	
Median Annual Flow (m³/s)		26.91			Median Annual Flow (m³/s)		13.96		Median Annual Flow (m³/s)		16.58	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.14	0.50	26.76		0.02	0.62	14.03		0.06	0.62	17.60	
November	0.10	0.75	26.60		0.04	0.44	14.14		0.07	0.64	17.45	
December	0.18	0.47	26.44		0.07	0.38	14.07		0.03	0.78	17.16	
January	-0.24	0.25	26.47		0.02	0.77	13.77		0.06	0.62	16.56	
February	-0.22	0.35	26.50		0.00	0.99	13.91		0.07	0.47	16.56	
March	-0.18	0.41	27.41		-0.03	0.61	14.09		0.05	0.71	16.60	
April	-0.07	0.67	27.37		-0.02	0.77	14.01		0.05	0.82	16.73	
May	-0.05	0.73	27.19		-0.02	0.87	14.04		0.04	0.78	17.01	
June	-0.02	0.86	27.27		-0.03	0.79	14.02		0.08	0.62	17.32	
July	0.02	0.82	26.74		-0.02	0.87	13.95		0.07	0.62	17.40	
August	-0.02	0.98	26.65		0.00	0.97	13.96		0.05	0.60	17.49	
September	0.06	0.86	26.88		0.01	0.87	14.00		0.06	0.64	17.68	
Average for all months, for each station	-0.02		26.86	0.00	0.00		14.00	0.00	0.06		17.13	0.00

* PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW IS ONLY CALCULATED FOR MONTHS WITH A STATISTICALLY SIGNIFICANT TREND OVER TIME. FOR MONTHS WITHOUT A SIGNIFICANT TREND, A VALUE OF ZERO IS ASSIGNED FOR CALCULATION OF THE OVERALL STATION SCORE.

TABLE. RESULTS OF RECENT-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE SOUTHEASTERN ATLANTIC OCEAN, NOVA SCOTIA SUB-WATERSHED.

01E - Southeastern Atlantic Ocean, Nova Scotia												
01ED007					01EE005				01EF001			
Start Year for Analysis		1983			Start Year for Analysis		1983		Start Year for Analysis		1983	
Median Annual Flow (m³/s)		6.01			Median Annual Flow (m³/s)		0.31		Median Annual Flow (m³/s)		23.96	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.03	0.39	6.03		0.00	0.40	0.29		0.00	0.99	23.65	
November	0.05	0.09	6.11		0.00	0.67	0.29		0.06	0.62	23.60	
December	0.04	0.20	5.89		0.00	0.41	0.30		0.12	0.51	23.57	
January	-0.01	0.86	5.82		0.00	0.37	0.32		0.10	0.57	24.63	
February	0.00	0.96	5.95		0.00	0.49	0.33		0.04	0.78	24.97	
March	-0.02	0.67	6.18		0.00	0.86	0.34		-0.04	0.73	25.33	
April	-0.01	0.79	6.44		0.00	0.86	0.33		-0.04	0.73	25.53	
May	-0.01	0.94	6.41		0.00	0.90	0.33		-0.04	0.86	25.59	
June	0.02	0.67	6.35		0.00	0.87	0.32		0.01	0.94	25.09	
July	0.01	0.91	6.23		0.00	0.29	0.32		-0.05	0.82	24.50	
August	0.01	0.82	6.23		0.00	0.84	0.31		-0.07	0.63	24.30	
September	0.02	0.53	6.11		0.00	1.00	0.29		-0.03	0.86	24.01	
Average for all months, for each station	0.01		6.15	0.00	0.00		0.31	0.00	0.00		24.56	0.00

* PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW IS ONLY CALCULATED FOR MONTHS WITH A STATISTICALLY SIGNIFICANT TREND OVER TIME. FOR MONTHS WITHOUT A SIGNIFICANT TREND, A VALUE OF ZERO IS ASSIGNED FOR CALCULATION OF THE OVERALL STATION SCORE.

TABLE. RESULTS OF RECENT-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE SOUTHEASTERN ATLANTIC OCEAN, NOVA SCOTIA SUB-WATERSHED.

01E - Southeastern Atlantic Ocean, Nova Scotia												
01EJ001					01EJ004				01EO001			
Start Year for Analysis		1983			Start Year for Analysis		1983		Start Year for Analysis		1983	
Median Annual Flow (m³/s)		2.98			Median Annual Flow (m³/s)		0.16		Median Annual Flow (m³/s)		26.03	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.00	1.00	2.90		0.00	0.18	0.16		0.15	0.36	25.79	
November	0.02	0.61	3.17		0.00	0.17	0.18		0.17	0.35	25.64	
December	0.04	0.15	3.09		0.00	0.02 *	0.17	2.39	0.34	0.15	26.75	
January	-0.02	0.39	3.09		0.00	0.52	0.17		-0.14	0.32	26.02	
February	0.01	0.87	3.17		0.00	0.91	0.19		-0.14	0.36	26.57	
March	0.00	0.93	3.13		0.00	0.62	0.18		-0.25	0.29	28.33	
April	0.00	0.87	3.22		0.00	0.40	0.18		-0.19	0.40	28.42	
May	-0.01	0.69	3.23		0.00	0.15	0.19		-0.13	0.49	26.74	
June	-0.01	0.44	3.17		0.00	0.35	0.18		-0.05	0.68	27.01	
July	-0.02	0.27	3.23		0.00	0.80	0.19		0.02	0.99	26.91	
August	0.00	0.74	2.99		0.00	0.25	0.18		0.16	0.36	26.79	
September	-0.01	0.75	2.89		0.00	0.34	0.16		0.13	0.28	25.84	
Average for all months, for each station	0.01		6.15	0.00	0.00		0.31	0.00	0.00		24.56	0.00
Average percentage change in median monthly flow for all months, weighted by median annual flow in the Maritime Coastal (Southeastern Atlantic Ocean, Nova Scotia)					0.00							

* PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW IS ONLY CALCULATED FOR MONTHS WITH A STATISTICALLY SIGNIFICANT TREND OVER TIME. FOR MONTHS WITHOUT A SIGNIFICANT TREND, A VALUE OF ZERO IS ASSIGNED FOR CALCULATION OF THE OVERALL STATION SCORE.

TABLE. RESULTS OF RECENT-TERM TREND ANALYSES FOR MEDIAN MONTHLY FLOW IN THE CAPE BRETON ISLAND SUB-WATERSHED.

01F - Cape Breton Island												
01FA001					01FB001				01FB003			
Start Year for Analysis		1978			Start Year for Analysis		1978		Start Year for Analysis		1978	
Median Annual Flow (m³/s)		3.86			Median Annual Flow (m³/s)		10.65		Median Annual Flow (m³/s)		12.00	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.00	0.853514	4.11		0.10	0.11	11.25		-0.02	0.71	11.94	
November	0.01	0.86	3.96		0.06	0.37	11.07		-0.02	0.61	11.98	
December	0.00	0.89	4.05		0.02	0.79	11.46		0.00	0.98	12.11	
January	-0.01	0.59	4.08		-0.04	0.30	10.82		-0.04	0.14	12.07	
February	-0.01	0.70	4.28		-0.04	0.37	10.72		-0.07	0.09	12.15	
March	-0.02	0.32	4.19		-0.04	0.39	10.93		-0.06	0.18	12.23	
April	-0.03	0.22	4.12		0.00	0.99	10.97		-0.05	0.23	12.33	
May	0.00	0.93	4.18		0.01	0.68	11.09		-0.05	0.18	12.04	
June	0.01	0.73	4.09		-0.01	0.69	10.88		-0.05	0.15	11.94	
July	-0.01	0.85	4.13		-0.01	0.85	11.03		-0.08	0.07	12.11	
August	0.01	0.41	4.12		0.00	0.97	11.27		-0.06	0.14	12.00	
September	0.02	0.49	3.83		0.08	0.14	11.26		-0.04	0.33	12.08	
Average for all months, for each station	0.00		4.09	0.00	0.01		11.06	0.00	-0.04		12.08	0.00

* PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW IS ONLY CALCULATED FOR MONTHS WITH A STATISTICALLY SIGNIFICANT TREND OVER TIME. FOR MONTHS WITHOUT A SIGNIFICANT TREND, A VALUE OF ZERO IS ASSIGNED FOR CALCULATION OF THE OVERALL STATION SCORE.

01F - Cape Breton Island												
01FC002					01FE002				01FJ002			
Start Year for Analysis		1978			Start Year for Analysis		1978		Start Year for Analysis		1978	
Median Annual Flow (m³/s)		5.24			Median Annual Flow (m³/s)		3.37		Median Annual Flow (m³/s)		0.31	
Month	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*	Theil-Sen Slope	Mann-Kendall p-value	Average Median Monthly Flow	Average Percentage Change in Median Monthly Flow*
October	0.04	0.23	5.31		0.00	0.91	3.67		0.00	0.31	0.32	
November	0.02	0.50	6.00		0.02	0.43	3.62		0.00	0.22	0.30	
December	0.02	0.51	6.62		0.00	0.97	3.76		0.00	0.60	0.31	
January	0.02	0.17	5.50		-0.02	0.29	3.33		0.00	0.72	0.32	
February	0.02	0.31	5.39		0.00	0.89	3.38		0.00	0.75	0.34	
March	0.00	0.85	5.19		-0.02	0.38	3.43		0.00	0.75	0.33	
April	0.00	0.80	5.42		-0.01	0.80	3.34		0.00	0.84	0.33	
May	0.00	0.90	5.40		0.01	0.48	3.66		0.00	0.73	0.35	
June	-0.01	0.86	5.27		0.00	0.99	3.63		0.00	0.63	0.37	
July	-0.02	0.66	5.27		-0.01	0.65	3.68		0.00	0.99	0.37	
August	0.00	0.91	5.72		0.01	0.48	3.64		0.00	0.75	0.35	
September	0.02	0.46	5.47		0.04	0.14	3.55		0.00	0.52	0.33	
Average for all months, for each station	0.01		5.55	0.00	0.00		3.56	0.00	0.00		0.33	0.00
Average percentage change in median monthly flow for all months, weighted by median annual flow in the Maritime Coastal (Southeastern Atlantic Ocean, Nova Scotia)					0.00							

* PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW IS ONLY CALCULATED FOR MONTHS WITH A STATISTICALLY SIGNIFICANT TREND OVER TIME. FOR MONTHS WITHOUT A SIGNIFICANT TREND, A VALUE OF ZERO IS ASSIGNED FOR CALCULATION OF THE OVERALL STATION SCORE.

TABLE. RESULTS OF LINEAR REGRESSION ANALYSES FOR LONG-TERM TRENDS IN MEDIAN ANNUAL FLOW IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED.

Sub-Basin	Station	Start Year	Intercept	Intercept Standard Error	Intercept T-Test Statistic	Intercept T-Test p-value	Slope	Slope Standard Error	Slope T-Test Statistic	Slope T-Test p-value	Adjusted R-Squared	F-Test Static	F-Test p-value
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01BC001	1962	-174.83	203.87	-0.86	0.40	0.11	0.10	1.04	0.30	0.00	1.08	0.30
	01BE001	1962	-120.36	158.69	-0.76	0.45	0.07	0.08	0.89	0.38	0.00	0.79	0.38
	01BO001	1962	-353.23	442.22	-0.80	0.43	0.21	0.22	0.96	0.34	0.00	0.92	0.34
	01BP001	1962	-353.23	442.22	-0.80	0.43	0.21	0.22	0.96	0.34	0.00	0.92	0.34
	01BQ001	1962	-93.92	77.34	-1.21	0.23	0.05	0.04	1.36	0.18	0.02	1.85	0.18
	01BU002	1962	-19.77	32.03	-0.62	0.54	0.01	0.02	0.74	0.46	-0.01	0.55	0.46
01C - Prince Edward Island	01CA003	1961	-2.87	2.76	-1.04	0.30	0.00	0.00	1.22	0.23	0.01	1.50	0.23
	01CB002	1961	-18.20	7.57	-2.41	0.02	0.01	0.00	2.65	0.01 *	0.11	7.01	0.01 *
01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01DG003	1921	1.84	4.37	0.42	0.67	0.00	0.00	-0.02	0.98	-0.01	0.00	0.98
	01DR001	1921	4.32	6.01	0.72	0.47	0.00	0.00	-0.24	0.81	-0.01	0.06	0.81
01E - Southeastern Atlantic Ocean, Nova Scotia	01EA003	1929	-152.78	84.98	-1.80	0.08	0.09	0.04	2.12	0.04 *	0.04	4.48	0.04 *
	01EC001	1929	-38.45	33.00	-1.17	0.25	0.03	0.02	1.57	0.12	0.02	2.47	0.12
	01EF001	1929	-5.71	71.44	-0.08	0.94	0.02	0.04	0.42	0.68	-0.01	0.18	0.68
01F - Cape Breton Island	01FB001	1960	45.62	45.70	1.00	0.32	-0.02	0.02	-0.76	0.45	-0.01	0.57	0.45
	01FB003	1960	39.88	42.71	0.93	0.35	-0.01	0.02	-0.65	0.52	-0.01	0.42	0.52
	01FC002	1960	66.90	29.56	2.26	0.03	-0.03	0.01	-2.07	0.04 *	0.06	4.28	0.04 *
	01FE002	1960	225.80	36.07	6.26	0.00	-0.11	0.02	-6.13	0.00 ***	0.41	37.54	0.00 ***

TABLE. RESULTS OF MANN-KENDALL NON-PARAMETRIC TREND ANALYSIS FOR LONG-TERM TRENDS IN MEDIAN ANNUAL FLOW IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED.

Sub-Basin	Station	Start Year	Theil -Sen Slope	Mann-Kendall Test Statistic	Mann-Kendall Test p-value	Median Annual Flow (m³/s)	Average Percentage Change in Median Annual Flow	Weighted Averaged Between Stations
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01BC001	1962	0.08	95.00	0.45	36.56	0.00	0.00
	01BE001	1962	0.06	109.00	0.38	20.91	0.00	
	01BO001	1962	0.18	89.00	0.47	69.95	0.00	
	01BP001	1962	0.06	166.00	0.18	19.26	0.00	
	01BQ001	1962	0.06	166.00	0.18	11.17	0.00	
	01BU002	1962	0.02	123.00	0.31	3.89	0.00	
01C - Prince Edward Island	01CA003	1961	0.00	138.00	0.27	0.52	0.00	0.24
	01CB002	1961	0.01	283.00	0.02 *	1.83	0.31	
01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01DG003	1921	0.00	69.00	0.82	1.76	0.00	0.00
	01DR001	1921	0.00	45.00	0.88	2.81	0.00	
01E - Southeastern Atlantic Ocean, Nova Scotia	01EA003	1929	0.06	423.00	0.10	27.29	0.16	0.07
	01EC001	1929	0.02	390.00	0.14	13.43	0.00	
	01EF001	1929	0.02	171.00	0.51	24.31	0.00	
01F - Cape Breton Island	01FB001	1960	0.00	-27.00	0.85	10.98	0.00	0.26
	01FB003	1960	-0.01	-73.00	0.58	12.10	0.00	
	01FC002	1960	-0.02	-278.00	0.04 *	5.56	0.05	
	01FE002	1960	-0.09	-587.00	0.00 ***	4.79	1.78	

FIGURE. TIME-SERIES OF LONG-TERM TRENDS IN MEDIAN ANNUAL FLOW FOR THE GULF OF ST. LAWRENCE AND NORTHERN BAY OF FUNDY, NEW BRUNSWICK SUB-WATERSHED, BY STATION.

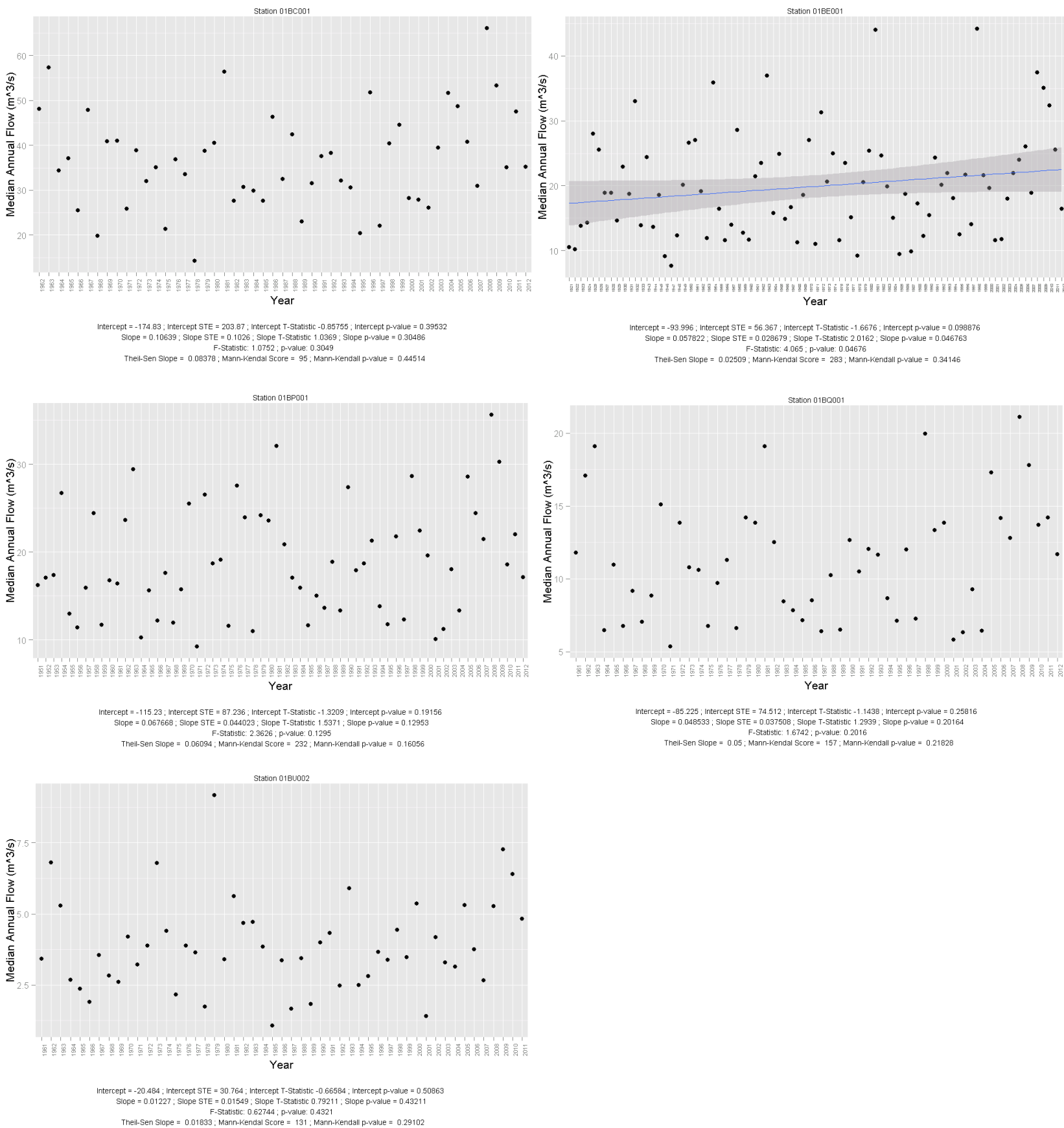


FIGURE. TIME-SERIES OF LONG-TERM TRENDS IN MEDIAN ANNUAL FLOW FOR THE PRINCE EDWARD ISLAND SUB-WATERSHED, BY STATION.

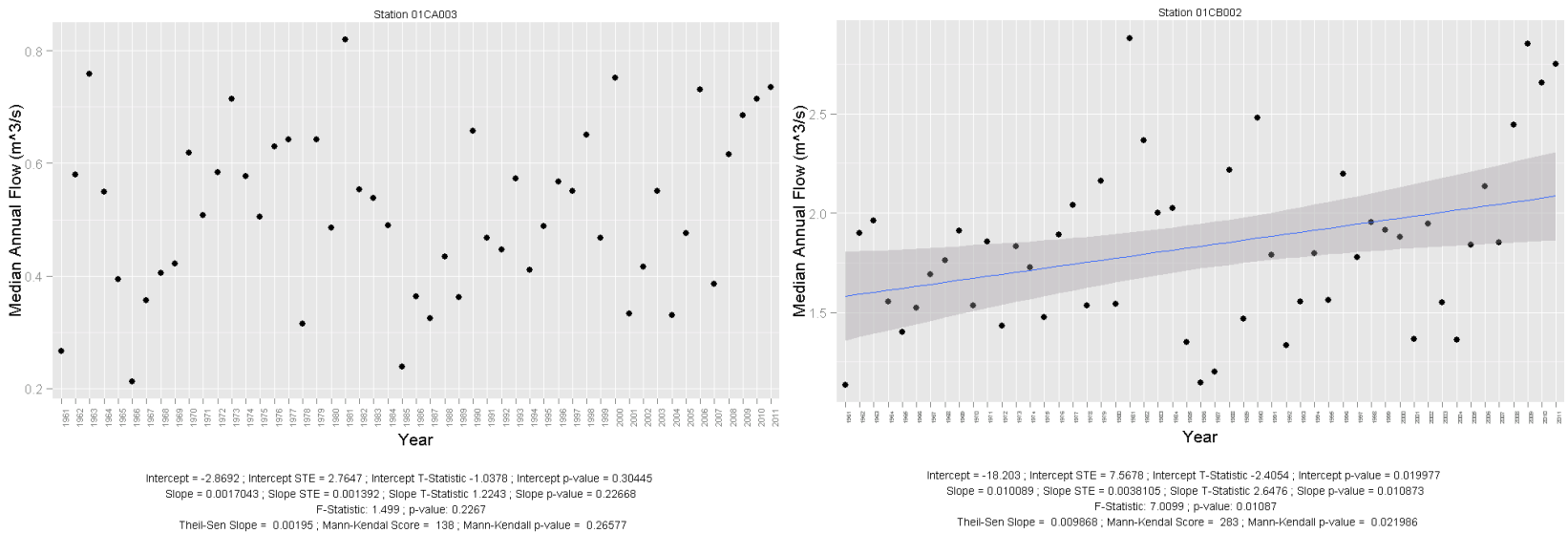


FIGURE. TIME-SERIES OF LONG-TERM TRENDS IN MEDIAN ANNUAL FLOW FOR THE BAY OF FUNDY AND GULF OF ST. LAWRENCE, NOVA SCOTIA SUB-WATERSHED, BY STATION.

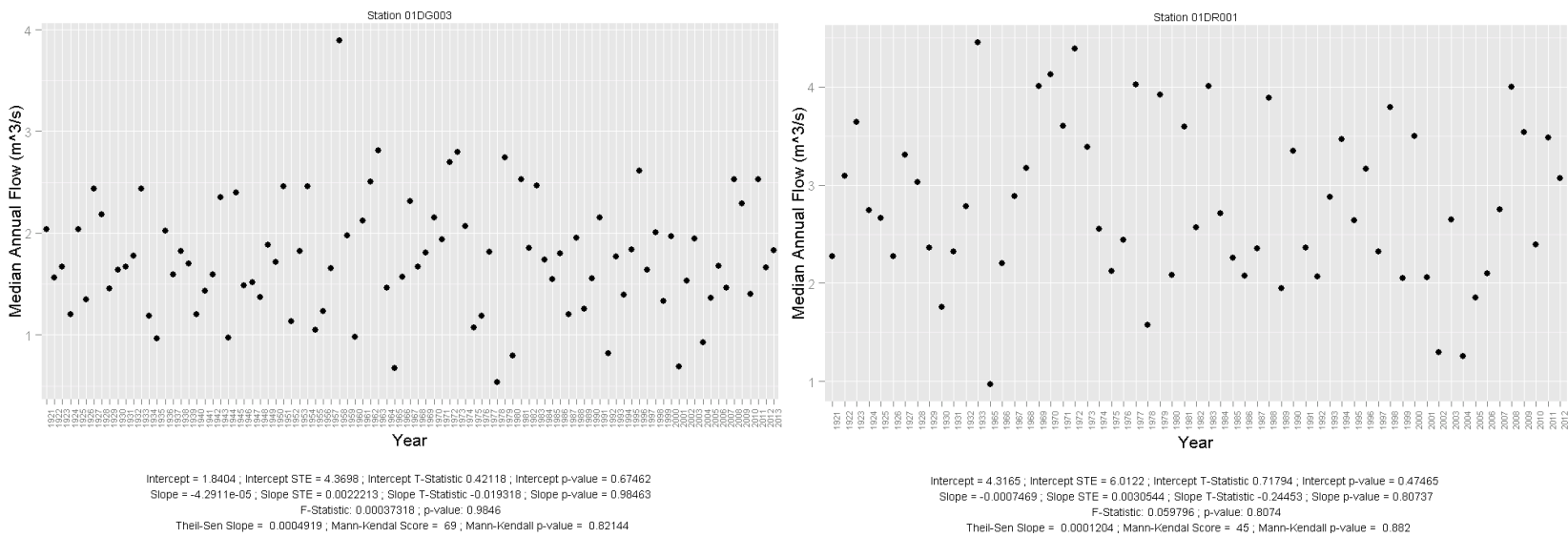


FIGURE. TIME-SERIES OF LONG-TERM TRENDS IN MEDIAN ANNUAL FLOW FOR THE SOUTHEASTERN ATLANTIC OCEAN, NOVA SCOTIA SUB-WATERSHED, BY STATION.

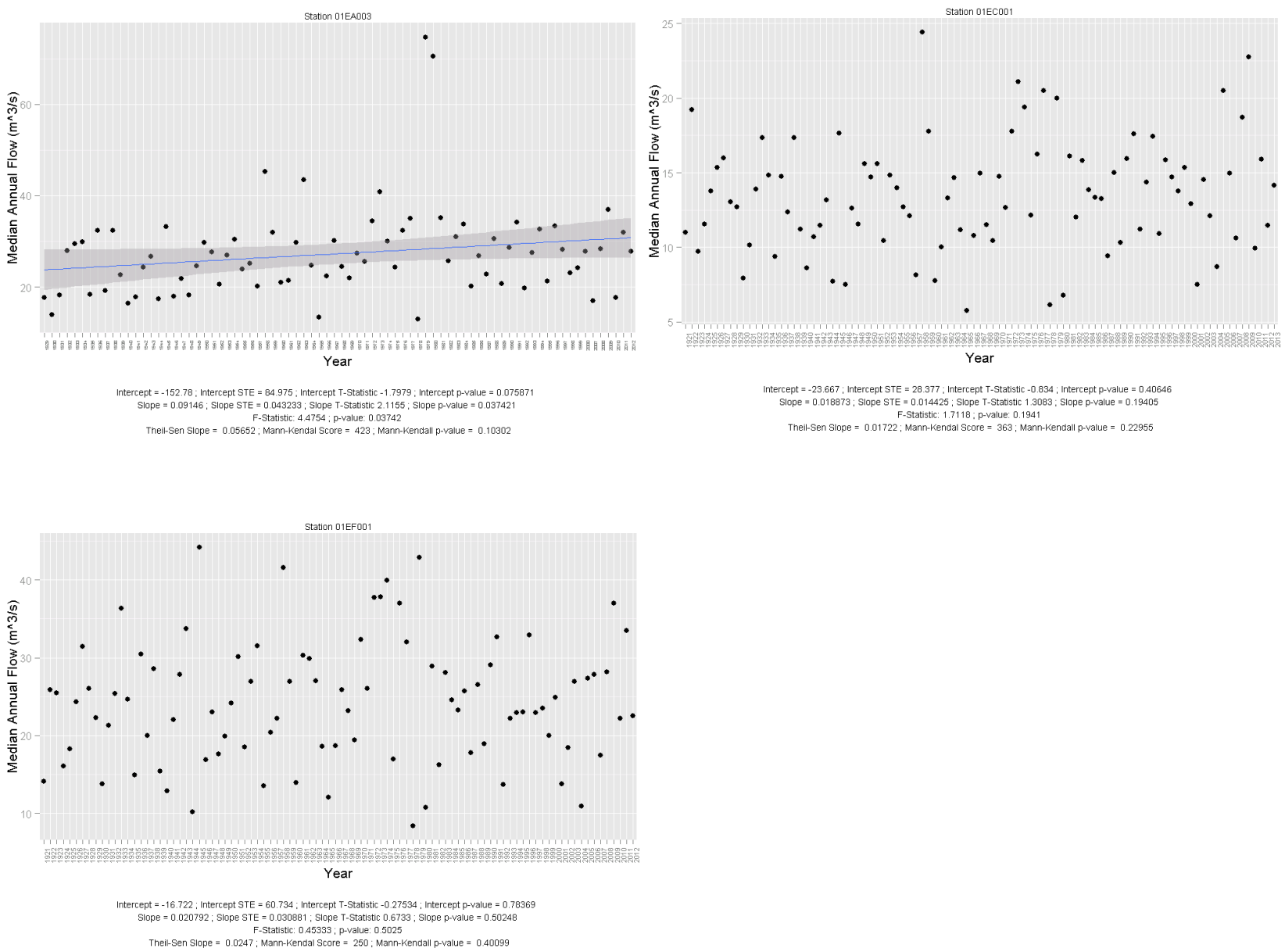


FIGURE. TIME-SERIES OF LONG-TERM TRENDS IN MEDIAN ANNUAL FLOW FOR THE CAPE BRETON SUB-WATERSHED, BY STATION.

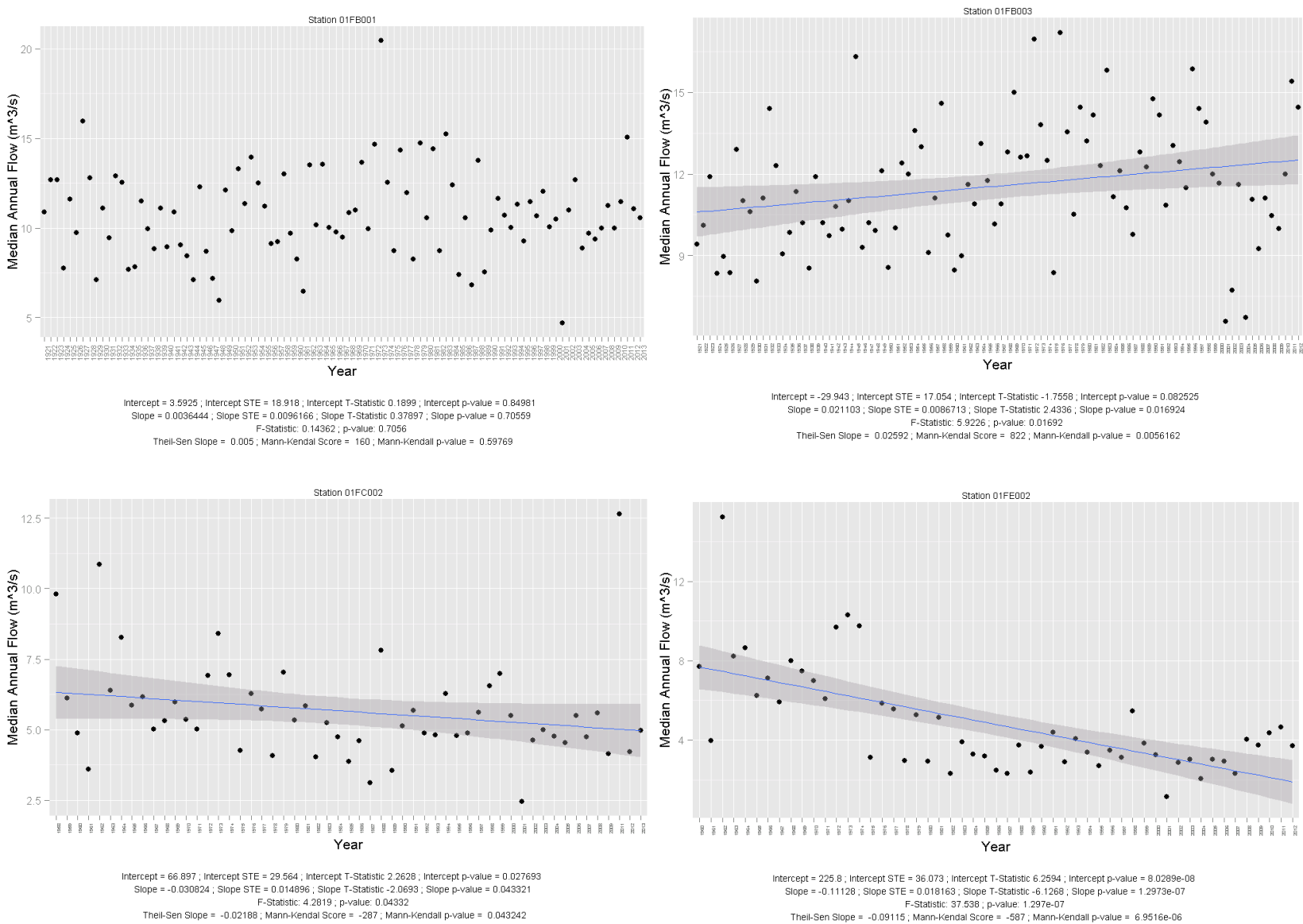


TABLE. RESULTS OF DAM IMPACT ANALYSES FOR MEDIAN MONTHLY FLOW OF STATION 01BU002 (1961-2011) IMPACTED BY THE DAM IN 1966 AND STATION 01BU003 (1962-2010) IMPACT BY THE DAM IN 1969, IN THE GULF OF SAINT LAWRENCE AND NORTHERN BAY OF FUNDY, NEW BRUNSWICK SUB-WATERSHED.

			Historical			Recent			Fligner-Killeen		Mann-Whitney					
Sub-watershed	Station	Month	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Test Statistic	p-value	Test Statistic	p-value	Percentage Change in Monthly Flow Between the Two Time Periods	Average Percentage Change Across Months*	Median Annual Flow (m³/s)	Weighted average across sub-watershed
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01BU002	October	5	3.74	4.56	46	3.44	3.82	1.05	0.31	14376.50	0.98	7.90	11.33%	3.88	0.14
		November	5	3.50	4.39	46	3.36	3.61	0.26	0.61	14074.50	0.82	3.86			
		December	5	3.14	3.92	46	3.41	3.64	0.15	0.69	13610.50	0.54	8.60			
		January	5	3.45	4.21	46	3.41	3.81	0.74	0.39	14237.00	0.89	1.30			
		February	5	3.51	4.14	46	3.69	4.14	0.00	0.98	13720.00	0.77	5.13			
		March	5	3.23	3.72	46	3.63	4.05	0.13	0.72	13553.50	0.66	12.38			
		April	5	3.74	4.07	46	3.78	4.04	0.14	0.70	13818.50	0.83	1.07			
		May	5	4.30	4.43	46	3.81	4.07	0.01	0.91	14055.00	0.99	11.40			
		June	5	4.83	4.72	46	3.82	4.09	0.05	0.82	14470.00	0.92	20.93			
		July	5	5.09	4.89	46	3.84	4.23	0.00	0.99	14291.50	0.96	24.48			
		August	5	4.65	5.28	46	3.64	4.03	0.44	0.51	14234.50	0.92	21.64			
		September	5	4.19	5.13	46	3.47	3.80	1.33	0.25	14315.00	0.98	17.30			
	01BU003	October	7	1.53	1.53	42	1.87	1.89	1.54	0.22	17703.00	0.29	22.62	19.67%	1.87	
		November	7	1.34	1.35	42	1.78	1.76	1.77	0.18	17812.00	0.33	33.33			
		December	7	1.51	1.51	42	1.83	1.84	3.38	0.07	17079.50	0.13	20.86			
		January	7	1.66	1.77	42	1.81	1.85	1.14	0.29	18586.00	0.68	9.06			
		February	7	1.64	1.68	42	1.81	1.91	2.15	0.14	18331.00	0.55	10.37			
		March	7	1.69	1.69	42	1.90	1.99	2.27	0.13	17982.00	0.39	12.46			
		April	7	1.63	1.66	42	1.97	1.97	2.91	0.09	18097.50	0.44	20.92			
		May	7	1.72	1.64	42	1.97	1.97	1.92	0.17	18460.00	0.61	14.53			
		June	7	1.60	1.58	42	1.96	1.95	1.94	0.16	17913.00	0.36	22.57			
		July	7	1.51	1.67	42	1.91	1.91	1.62	0.20	17937.50	0.37	26.16			
		August	7	1.52	1.67	42	1.84	1.89	2.62	0.11	17667.50	0.28	21.12			
		September	7	1.54	1.58	42	1.88	1.91	1.58	0.21	17616.00	0.26	22.08			

TABLE. NON-PARAMETRIC COMPARISON OF VARIANCE FOR RECENT (1967-2014) VS. HISTORICAL (1921-1966) MONTHLY FLOW IN THE MARITIME COASTAL WATERSHED.																
			Historic			Recent			Fligner-Killeen		Mann-Whitney					
Sub-Basin	Station	Month	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Test Statistic	p-value	Test Statistic	p-value	Magnitude of Change in Monthly Flow (%)	Average Change Across Months (%)*	Average Change Per Sub-Basin**	
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01BC001	October	25	34.30	28.17	26	37.30	31.43	1.44	0.23	43575.00	0.39	8.75	4.81%	7.51%	
		November	25	35.40	28.47	26	36.90	31.21	0.72	0.40	43215.00	0.31	4.24			
		December	25	34.50	27.58	26	36.50	30.76	0.81	0.37	43292.00	0.33	5.80			
		January	25	32.80	27.13	26	35.80	31.80	4.14	0.04 *	42088.00	0.12	9.15			
		February	25	34.00	27.13	26	36.40	32.69	4.60	0.03 *	42069.00	0.12	7.06			
		March	25	34.00	27.28	26	37.30	32.10	4.55	0.03 *	42368.00	0.16	9.71			
		April	25	34.00	28.02	26	36.10	31.13	2.94	0.09	42922.00	0.25	6.18			
		May	25	34.80	28.76	26	35.85	30.91	1.66	0.20	43226.50	0.31	3.02			
		June	25	36.00	30.10	26	36.50	31.06	1.65	0.20	43449.00	0.36	1.39			
		July	25	36.80	31.13	26	36.85	30.62	1.43	0.23	44357.50	0.63	0.14			
		August	25	35.70	29.95	26	35.85	30.32	0.76	0.38	44393.00	0.64	0.42			
		September	25	34.80	29.21	26	35.45	29.65	0.61	0.43	44019.00	0.52	1.87			
	01BE001	October	38	16.70	13.97	48	18.95	15.49	0.00	0.98	122433.50	0.58	13.47	9.35%		
		November	38	17.40	14.54	48	19.75	16.21	0.00	0.94	122317.00	0.52	13.51			
		December	38	17.40	13.94	48	19.80	16.17	0.03	0.87	122205.50	0.50	13.79			
		January	38	17.70	15.12	48	18.85	15.03	0.29	0.59	121452.00	0.44	6.50			
		February	38	17.70	15.12	48	19.15	15.56	0.01	0.91	120619.50	0.34	8.19			
		March	38	18.10	15.49	48	18.60	15.27	0.31	0.57	120743.00	0.35	2.76			
		April	38	18.15	15.57	48	18.85	15.27	0.25	0.62	120792.00	0.36	3.86			
		May	38	17.45	14.39	48	19.00	15.60	0.09	0.76	119964.50	0.27	8.88			
		June	38	17.60	14.77	48	18.80	15.12	0.11	0.74	121282.50	0.42	6.82			
		July	38	17.55	14.70	48	19.15	15.64	0.02	0.88	120885.50	0.37	9.12			
		August	38	17.30	14.42	48	19.85	16.09	0.07	0.80	121957.00	0.51	14.74			
		September	38	17.45	14.66	48	19.30	15.17	0.21	0.65	123202.50	0.70	10.60			
	01BP001	October	30	16.60	14.11	32	18.15	13.80	0.21	0.65	64947.00	0.27	9.34	9.20%		
		November	30	16.50	13.71	32	18.10	14.00	0.04	0.84	64755.50	0.24	9.70			
		December	30	17.00	14.00	32	17.50	13.22	0.96	0.33	65377.00	0.34	2.94			
		January	30	15.90	12.60	32	18.95	15.81	3.51	0.06	62049.00	0.04 *	19.18			
		February	30	16.40	13.51	32	18.75	15.55	2.07	0.15	61932.50	0.04 *	14.33			
		March	30	16.85	13.52	32	19.00	15.41	2.84	0.09	62419.00	0.06	12.76			
		April	30	17.05	14.09	32	19.25	15.27	0.75	0.39	64120.50	0.18	12.90			
		May	30	18.30	15.52	32	19.00	15.12	0.05	0.83	64739.50	0.26	3.83			
		June	30	18.20	15.61	32	19.00	15.14	0.02	0.90	64218.00	0.20	4.40			
		July	30	18.10	15.65	32	19.25	15.08	0.16	0.69	65103.50	0.32	6.35			
		August	30	17.80	15.52	32	19.10	15.17	0.17	0.68	64776.50	0.24	7.30			
		September	30	17.60	14.89	32	18.90	14.56	0.00	0.99	64763.00	0.24	7.39			
	01BQ001	October	25	10.40	8.95	27	10.40	9.03	0.30	0.59	47187.50	0.98	0.00	9.30%		
		November	25	10.50	9.15	27	10.90	9.59	0.00	0.97	46463.00	0.76	3.81			
		December	25	10.10	8.35	27	10.65	9.16	0.19	0.66	46835.50	0.89	5.45			
		January	25	9.20	7.56	27	11.25	10.27	7.69	0.01 **	43253.50	0.08	22.28			
		February	25	9.40	7.72	27	10.85	9.90	5.50	0.02 *	43467.00	0.09	15.43			
		March	25	9.49	8.32	27	10.50	9.76	2.42	0.12	44483.50	0.23	10.64			
		April	25	9.54	8.51	27	11.10	9.77	1.73	0.19	45538.50	0.47	16.35			
		May	25	9.63	8.32	27	11.85	10.29	3.75	0.05	45652.50	0.50	23.05			
		June	25	10.60	9.00	27	11.30	9.91	1.40	0.24	45953.00	0.59	6.60			
		July	25	11.00	9.68	27	11.10	9.73	0.08	0.78	47683.50	0.81	0.91			
		August	25	10.50	9.36	27	10.95	9.69	0.06	0.81	47944.00	0.72	4.29			
		September	25	10.90	9.56	27	10.60	9.24	0.30	0.59	47493.00	0.87	2.75			
	01BU002	October	25	3.43	3.82	26	3.49	3.88	0.08	0.78	45948.50	0.85	1.90	22.11		
		November	25	3.33	3.64	26	3.39	3.67	0.01	0.91	45927.50	0.86	1.95			
		December	25	3.40	3.76	26	3.40	3.63	0.17	0.68	45717.50	0.94	0.00			
		January	25	3.31	3.67	26	3.59	4.08	1.34	0.25	45240.00	0.94	8.46			
		February	25	3.40	3.69	26	3.81	4.44	3.95	0.05 *	44493.50	0.67	12.06			
		March	25	3.77	4.00	26	3.56	4.02	0.00	0.95	45773.00	0.86	5.57			
		April	25	3.79	3.87	26	3.75	4.16	0.04	0.85	46600.50	0.57	1.19			
		May	25	3.96	4.09	26	3.74	4.17	0.05	0.83	47144.50	0.41	5.68			
		June	25	4.19	4.41	26	3.66	4.05	1.30	0.25	47598.00	0.34	12.65			
		July	25	4.11	4.54	26	3.67	4.09	0.74	0.39	47673.50	0.32	10.83			
		August	25	3.82	4.22	26	3.60	4.05	0.03	0.87	46721.50	0.59	5.89			

			Historical			Recent			Fligner-Killeen		Mann-Whitney				
Sub-Basin	Station	Month	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Test Statistic	p-value	Test Statistic	p-value	Magnitude of Change in Monthly Flow (%)	Average Change Across Months (%)*	Average Change Per Sub-Basin* *
01C - Prince Edward Island	01CA003	October	25	0.49	0.43	26	0.49	0.38	1.09	0.30	45356.00	0.93	0.00	2.29%	2.51%
		November	25	0.50	0.44	26	0.51	0.39	0.78	0.38	45190.50	0.87	1.29		
		December	25	0.50	0.42	26	0.50	0.38	0.31	0.58	45036.00	0.81	0.30		
		January	25	0.51	0.41	26	0.51	0.43	0.01	0.92	45313.00	0.91	0.10		
		February	25	0.50	0.41	26	0.51	0.45	0.56	0.46	44125.00	0.51	1.80		
		March	25	0.51	0.42	26	0.52	0.44	0.04	0.85	45683.50	0.95	1.96		
		April	25	0.51	0.42	26	0.52	0.45	0.19	0.66	46178.50	0.77	1.96		
		May	25	0.55	0.47	26	0.53	0.46	0.53	0.47	46334.50	0.72	4.71		
		June	25	0.53	0.45	26	0.49	0.43	0.46	0.50	46503.50	0.66	7.25		
		July	25	0.51	0.44	26	0.49	0.42	0.20	0.65	46687.50	0.60	4.34		
		August	25	0.51	0.44	26	0.49	0.41	0.27	0.60	45757.00	0.92	2.86		
		September	25	0.50	0.44	26	0.50	0.40	0.41	0.52	45182.50	0.86	0.90		
	01BE001	October	25	1.83	0.98	26	1.80	1.03	0.46	0.50	45314.00	0.91	1.91	2.91%	
		November	25	1.83	0.96	26	1.83	1.07	1.55	0.21	45159.00	0.85	0.00		
		December	25	1.83	0.93	26	1.80	1.00	1.18	0.28	46031.50	0.82	1.91		
		January	25	1.81	0.90	26	1.86	1.07	0.52	0.47	45602.00	0.98	2.76		
		February	25	1.77	0.86	26	1.90	1.13	2.68	0.10	45133.00	0.85	7.65		
		March	25	1.79	0.90	26	1.87	1.13	2.34	0.13	45509.00	0.98	4.48		
		April	25	1.75	0.85	26	1.83	1.05	1.26	0.26	46043.00	0.82	4.29		
		May	25	1.82	0.96	26	1.83	1.03	0.04	0.83	46273.50	0.74	0.55		
		June	25	1.86	0.98	26	1.80	0.99	0.03	0.85	46653.00	0.61	3.23		
		July	25	1.81	0.99	26	1.78	0.98	0.04	0.83	46545.00	0.64	1.93		
		August	25	1.87	1.01	26	1.83	1.08	0.02	0.89	46129.00	0.79	2.14		
		September	25	1.74	0.94	26	1.81	1.06	0.60	0.44	45048.50	0.81	4.03		
01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01DG003	October	46	1.67	2.00	47	1.60	1.84	3.47	0.06	156121.00	0.50	4.49	6.18%	5.77%
		November	46	1.70	2.06	47	1.59	1.86	2.31	0.13	156196.50	0.53	6.47		
		December	46	1.67	1.99	47	1.61	1.94	0.29	0.59	155436.50	0.63	3.59		
		January	46	1.70	1.99	47	1.75	2.05	0.00	0.95	155630.00	0.60	2.65		
		February	46	1.78	2.06	47	1.76	2.00	1.25	0.26	156713.00	0.47	1.12		
		March	46	1.69	1.95	47	1.81	2.04	0.05	0.81	154259.50	0.79	7.12		
		April	46	1.70	2.00	47	1.96	2.18	0.60	0.44	151743.50	0.84	15.29		
		May	46	1.67	1.95	47	1.86	2.10	1.11	0.29	150363.50	0.64	11.38		
		June	46	1.66	1.89	47	1.84	2.01	0.66	0.42	150250.50	0.63	10.88		
		July	46	1.67	1.96	47	1.76	1.94	0.50	0.48	153263.00	0.94	5.39		
		August	46	1.64	2.02	47	1.72	1.94	2.27	0.13	155791.50	0.58	4.88		
		September	46	1.64	1.97	47	1.66	1.88	1.74	0.19	156181.00	0.50	0.91		
	01DR001	October	17	2.55	3.13	48	2.64	2.69	7.38	0.01 **	55348.00	0.43	3.53	5.05%	
		November	17	2.55	3.19	48	2.66	2.77	6.76	0.01 **	54775.50	0.65	4.31		
		December	17	3.03	3.78	48	2.70	2.80	11.06	0.00 ***	55121.50	0.55	10.89		
		January	17	2.55	3.02	48	2.82	2.99	1.34	0.25	53083.50	0.85	10.59		
		February	17	2.83	3.36	48	2.90	3.05	6.43	0.01 *	52736.50	0.75	2.47		
		March	17	2.83	3.53	48	2.80	2.94	7.47	0.01 **	52974.00	0.82	1.06		
		April	17	2.83	3.37	48	2.97	3.10	4.88	0.03 *	52338.50	0.63	4.95		
		May	17	2.78	3.31	48	3.05	3.16	3.46	0.06	51585.00	0.44	9.71		
		June	17	3.03	3.53	48	2.93	3.01	9.58	0.00 **	53302.00	1.00	3.30		
		July	17	3.03	3.41	48	2.92	2.89	8.15	0.00 **	53160.50	0.96	3.63		
		August	17	2.78	3.09	48	2.78	2.77	5.36	0.02 *	54143.00	0.74	0.00		
		September	17	2.78	3.30	48	2.61	2.68	10.53	0.00 **	55766.00	0.34	6.12		

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

** Sub-basin value is weighted average based on median annual flow per station.

01E - Southeastern Atlantic Ocean, Nova Scotia	01EA003	October	41	24.70	19.87	37	26.95	24.09	1.68	0.20	100873.00	0.62	9.11	16.48%	11.32%
		November	41	24.90	20.31	37	26.95	24.31	2.20	0.14	100790.50	0.61	8.23		
		December	41	24.70	20.31	37	27.00	24.69	3.91	0.05 *	100443.00	0.55	9.31		
		January	41	23.80	17.64	37	28.90	24.46	11.74	0.00 ***	97341.00	0.15	21.43		
		February	41	23.90	17.94	37	29.10	24.91	8.22	0.00 **	97799.00	0.18	21.76		
		March	41	23.80	17.79	37	29.20	24.46	5.56	0.02 *	97501.50	0.16	22.69		
		April	41	23.90	17.94	37	28.80	25.06	5.28	0.02 *	97786.00	0.18	20.50		
		May	41	24.20	18.68	37	28.50	25.06	6.75	0.01 **	97851.00	0.19	17.77		
		June	41	23.20	18.09	37	28.60	24.91	8.28	0.00 **	97977.00	0.20	23.28		
		July	41	23.70	18.98	37	27.90	24.61	6.82	0.01 **	98733.50	0.27	17.72		
		August	41	24.20	19.57	37	27.80	24.91	4.55	0.03 *	99643.50	0.39	14.88		
		September	41	24.30	19.72	37	27.00	24.02	2.92	0.09	100431.50	0.51	11.11		
	01EC001	October	51	12.70	11.82	48	14.10	13.00	2.67	0.10	163166.50	0.14	11.02	10.47%	
		November	51	12.70	11.82	48	14.05	12.96	3.04	0.08	163055.50	0.14	10.63		
		December	51	12.60	11.59	48	13.70	12.68	3.81	0.05	162156.00	0.10	8.73		
		January	51	12.70	11.12	48	14.20	12.97	7.73	0.01 **	162921.00	0.13	11.81		
		February	51	12.90	11.36	48	14.15	12.83	5.50	0.02 *	164042.50	0.19	9.69		
		March	51	13.00	11.76	48	14.00	12.74	4.83	0.03 *	163227.50	0.15	7.69		
		April	51	12.90	12.02	48	14.00	12.79	4.24	0.04 *	161765.00	0.09	8.53		
		May	51	12.45	11.45	48	14.15	12.56	5.95	0.01 *	160154.00	0.05 *	13.65		
		June	51	12.20	11.28	48	14.00	12.72	6.46	0.01 *	159713.50	0.04 *	14.75		
		July	51	12.70	11.82	48	13.90	12.79	5.42	0.02 *	160712.50	0.06	9.45		
		August	51	12.30	11.22	48	13.55	12.51	2.91	0.09	161946.50	0.09	10.16		
		September	51	12.65	11.74	48	13.85	12.55	2.14	0.14	163095.50	0.14	9.49		
	01EF001	October	48	23.60	25.84	50	23.80	26.36	0.16	0.69	171757.00	0.85	0.85	3.20%	
		November	48	23.40	25.62	50	24.10	26.40	0.05	0.83	170654.00	0.99	2.99		
		December	48	22.60	25.37	50	23.50	26.11	0.05	0.82	171239.00	0.93	3.98		
		January	48	25.20	25.49	50	25.00	28.02	3.97	0.05 *	168607.50	0.72	0.79		
		February	48	25.10	25.34	50	24.50	27.46	1.56	0.21	170024.00	0.91	2.39		
		March	48	24.60	24.60	50	25.00	27.41	2.76	0.10	168533.50	0.71	1.63		
		April	48	24.40	24.51	50	25.05	26.84	4.51	0.03 *	166531.00	0.47	2.66		
		May	48	23.60	23.74	50	25.45	27.06	7.08	0.01 **	165393.00	0.36	7.84		
		June	48	24.10	24.61	50	25.55	27.06	3.60	0.06	166887.00	0.51	6.02		
		July	48	24.40	24.83	50	25.65	26.57	1.12	0.29	169548.50	0.84	5.12		
		August	48	24.40	24.76	50	25.15	26.70	0.08	0.78	170844.00	0.98	3.07		
		September	48	24.20	25.55	50	23.95	25.76	0.16	0.32	171796.00	0.85	1.03		

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

** Sub-basin value is weighted average based on median annual flow per station.

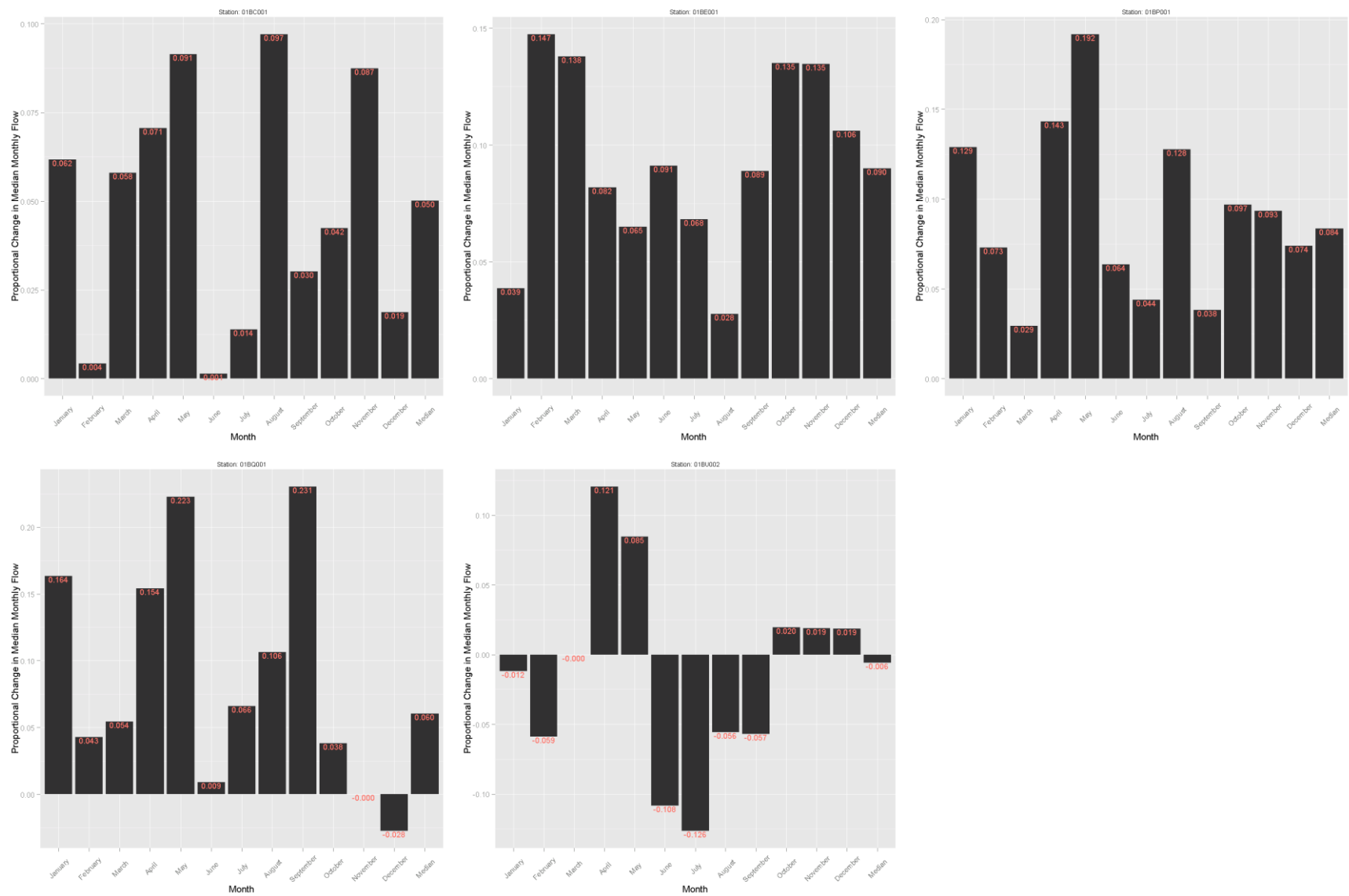
			Historical			Recent			Fligner-Killeen		Mann-Whitney				
Sub-Basin	Station	Month	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Number of Years of Sampling	Median Monthly Flow (m³/s)	Median Absolute Deviation in Monthly Flow (m³/s)	Test Statistic	p-value	Test Statistic	p-value	Magnitud e of Change in Monthly Flow (%)	Average Change Across Months (%)*	Average Change Per Sub-Basin**
01F - Cape Breton Island	01FB001	October	48	10.40	7.86	50	10.80	8.55	0.80	0.37	163531.50	0.35	3.85	8.56%	18.79%
		November	48	9.97	7.16	50	10.50	8.28	3.44	0.06	160576.50	0.15	5.32		
		December	48	10.10	7.67	50	10.90	8.56	2.97	0.08	158651.50	0.07	7.92		
		January	48	10.00	7.52	50	10.70	8.07	0.14	0.71	162450.50	0.24	7.00		
		February	48	10.10	7.86	50	11.10	8.47	0.24	0.62	161911.50	0.20	9.90		
		March	48	10.10	7.92	50	11.05	8.44	1.48	0.22	161511.50	0.18	9.41		
		April	48	10.05	7.78	50	11.20	8.15	2.07	0.15	160254.00	0.12	11.44		
		May	48	9.91	7.68	50	11.45	8.64	3.66	0.06	157462.50	0.04 *	15.54		
		June	48	9.67	7.31	50	11.10	8.44	2.83	0.09	158063.00	0.05	14.79		
		July	48	9.72	7.44	50	11.10	8.30	1.07	0.30	161438.50	0.18	14.26		
		August	48	10.70	8.30	50	10.85	8.39	0.12	0.73	166725.50	0.70	1.40		
		September	48	10.60	8.29	50	10.80	8.51	0.00	0.97	166354.00	0.66	1.89		
	01FB003	October	48	10.60	7.56	47	12.10	8.70	8.93	0.00 **	144863.00	0.01 **	14.15	15.03%	
		November	48	10.50	7.38	47	12.00	8.93	9.70	0.00 **	144984.50	0.01 **	14.29		
		December	48	10.70	7.43	47	11.90	8.90	8.19	0.00 **	145061.00	0.01 **	11.21		
		January	48	10.50	6.88	47	12.30	8.39	10.40	0.00 **	144961.50	0.01 **	17.14		
		February	48	10.50	6.82	47	12.30	8.27	8.82	0.00 **	145206.50	0.01 **	17.14		
		March	48	10.50	7.04	47	12.40	8.52	11.48	0.00 ***	144543.50	0.01 **	18.10		
		April	48	10.50	7.13	47	12.40	8.71	12.61	0.00 ***	143433.50	0.00 **	18.10		
		May	48	10.70	7.29	47	12.25	8.67	9.22	0.00 **	143283.00	0.00 **	14.49		
		June	48	10.80	7.41	47	12.15	8.64	9.19	0.00 **	144164.00	0.00 **	12.50		
		July	48	10.70	7.26	47	12.10	8.61	9.98	0.00 **	143812.50	0.00 **	13.08		
		August	48	10.60	7.26	47	12.20	8.72	10.15	0.00 **	144827.00	0.01 **	15.09		
		September	48	10.60	7.56	47	12.20	8.86	9.50	0.00 **	145193.00	0.01 **	15.09		
	01FC002	October	27	5.71	4.55	28	4.81	3.72	3.53	0.06	55675.00	0.04 *	15.76	13.13%	
		November	27	5.61	4.61	28	4.74	3.54	6.25	0.01 *	55140.00	0.07	15.51		
		December	27	5.69	4.79	28	4.94	4.03	3.41	0.06	54440.00	0.13	13.18		
		January	27	5.59	4.24	28	5.10	3.68	4.21	0.04 *	54628.50	0.11	8.77		
		February	27	5.75	4.48	28	5.20	3.75	3.52	0.06	54511.50	0.12	9.57		
		March	27	5.49	4.20	28	4.99	3.74	2.92	0.09	54601.00	0.11	9.11		
		April	27	5.54	4.42	28	4.93	3.60	5.80	0.02 *	54998.50	0.08	11.01		
		May	27	5.97	4.77	28	5.18	3.93	9.02	0.00 **	56043.00	0.03 *	13.23		
		June	27	5.72	4.45	28	4.92	3.71	5.39	0.02 *	55632.50	0.04 *	13.99		
		July	27	5.78	4.49	28	4.77	3.53	10.35	0.00 **	56601.00	0.01 *	17.47		
		August	27	5.64	4.36	28	4.80	3.57	5.97	0.01 *	56620.50	0.01 *	14.89		
		September	27	5.58	4.28	28	4.74	3.62	2.40	0.12	55293.00	0.06	15.05		
	01FE002	October	26	5.62	5.60	27	3.07	2.91	30.36	0.00 ***	59645.50	0.00 ***	45.46	46.02%	
		November	26	5.74	5.91	27	3.16	2.87	43.46	0.00 ***	59705.00	0.00 ***	44.90		
		December	26	5.77	5.94	27	3.25	2.97	39.46	0.00 ***	58900.00	0.00 ***	43.63		
		January	26	5.83	5.98	27	2.98	2.48	56.74	0.00 ***	61617.00	0.00 ***	48.89		
		February	26	5.93	5.97	27	2.95	2.59	52.44	0.00 ***	60871.00	0.00 ***	50.21		
		March	26	5.58	5.66	27	3.05	2.74	51.68	0.00 ***	60772.50	0.00 ***	45.38		
		April	26	5.96	5.95	27	3.11	2.79	53.46	0.00 ***	60727.50	0.00 ***	47.82		
		May	26	5.89	5.92	27	3.41	3.14	52.57	0.00 ***	60386.00	0.00 ***	42.14		
		June	26	6.23	6.36	27	3.48	3.06	51.65	0.00 ***	60398.50	0.00 ***	44.14		
		July	26	6.63	6.63	27	3.21	2.85	68.78	0.00 ***	62148.50	0.00 ***	51.55		
		August	26	6.12	6.06	27	3.17	2.81	55.83	0.00 ***	61604.50	0.00 ***	48.16		
		September	26	5.61	5.44	27	3.37	3.06	36.85	0.00 ***	60193.00	0.00 ***	40.02		

* Percentage change in median monthly flow is only calculated for months with a statistically significant trend over time. For months without a significant trend, a value of zero is assigned for calculation of the overall station score.

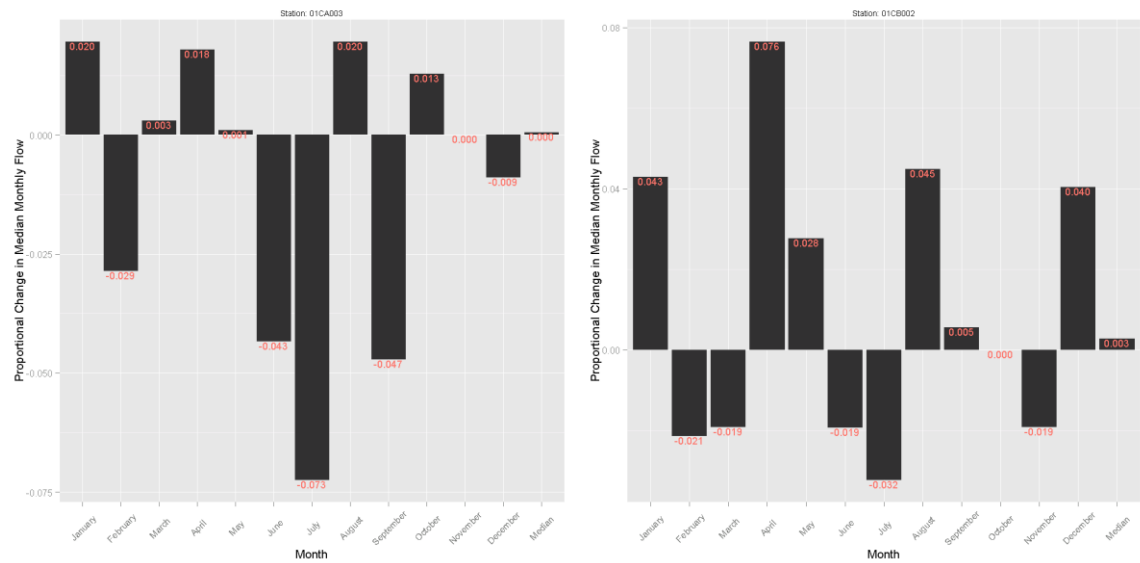
** Sub-basin value is weighted average based on median annual flow per station.

FIGURE. PERCENTAGE CHANGE IN MEDIAN MONTHLY FLOW FOR RECENT (1967-2014) VS. HISTORICAL (1921-1966) PERIODS IN MARITIME COSATAL WATERSHED, BY SUB-WATERSHED AND STATION.

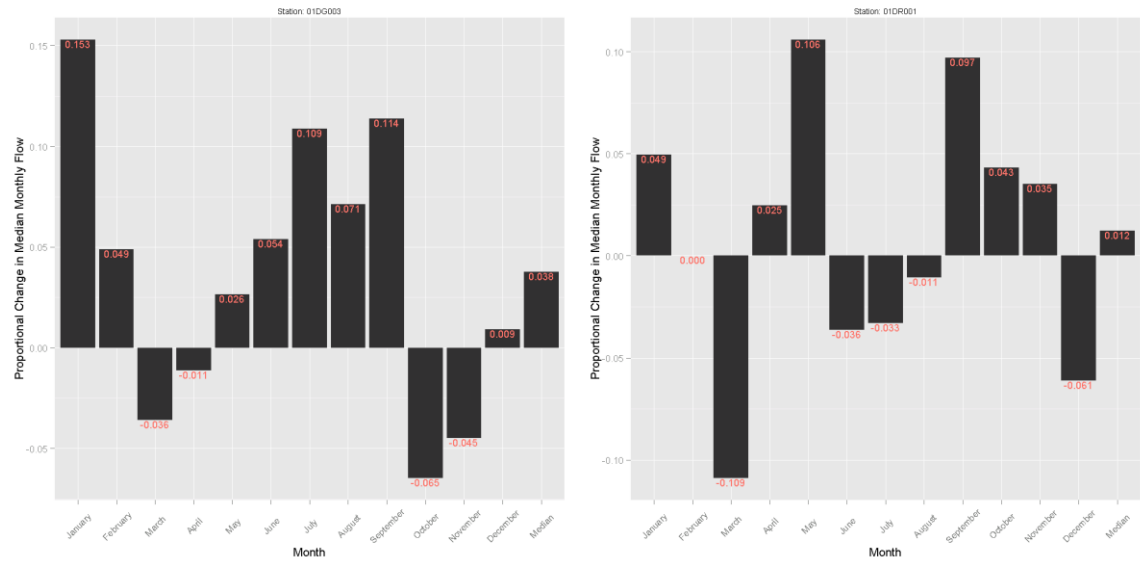
01B - GULF OF ST. LAWRENCE AND NORTHERN BAY OF FUNDY, NEW BRUNSWICK.



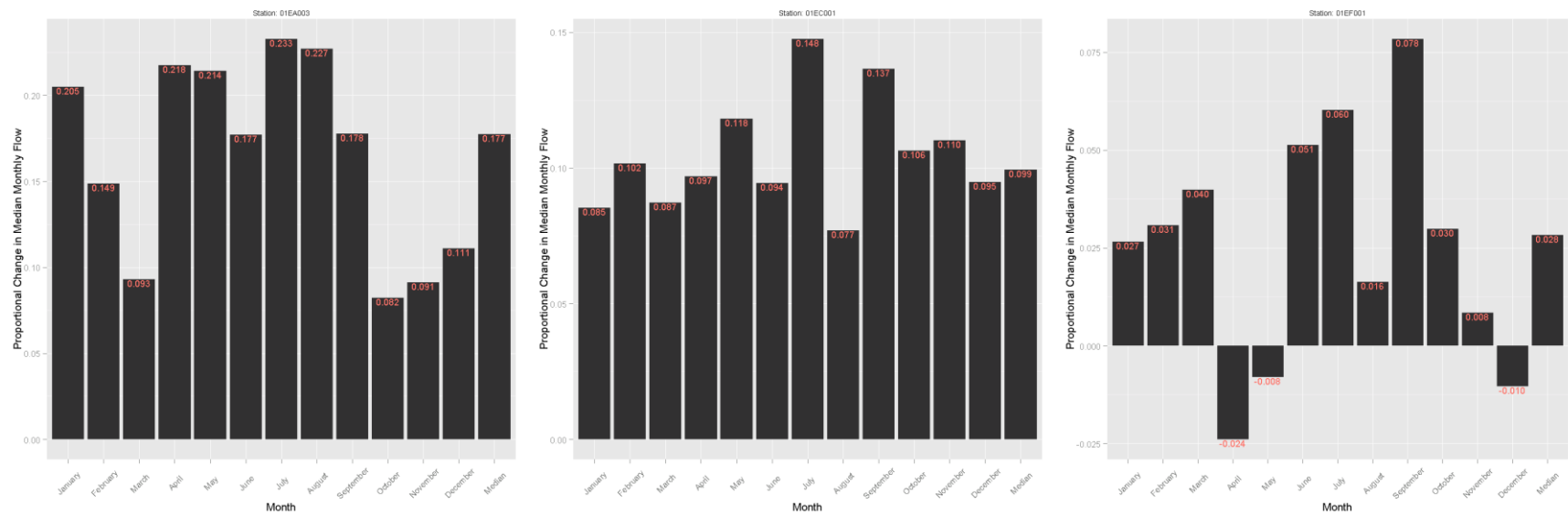
01C - PRINCE EDWARD ISLAND



01D - BAY OF FUNDY AND GULF OF ST. LAWRENCE, NOVA SCOTIA



01E - Southeastern Atlantic Ocean, Nova Scotia



01F - Cape Breton Island

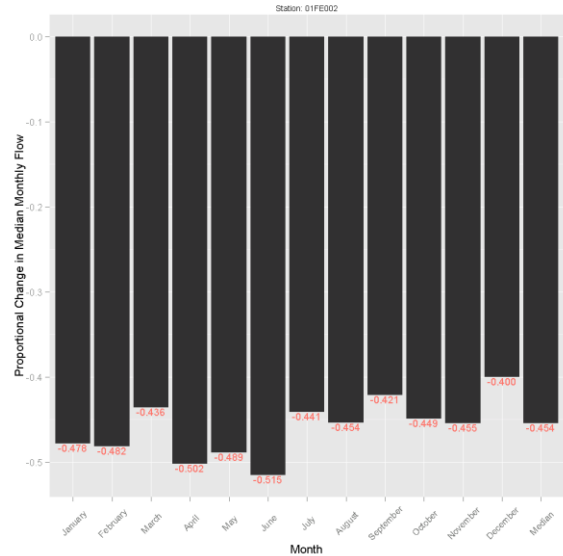
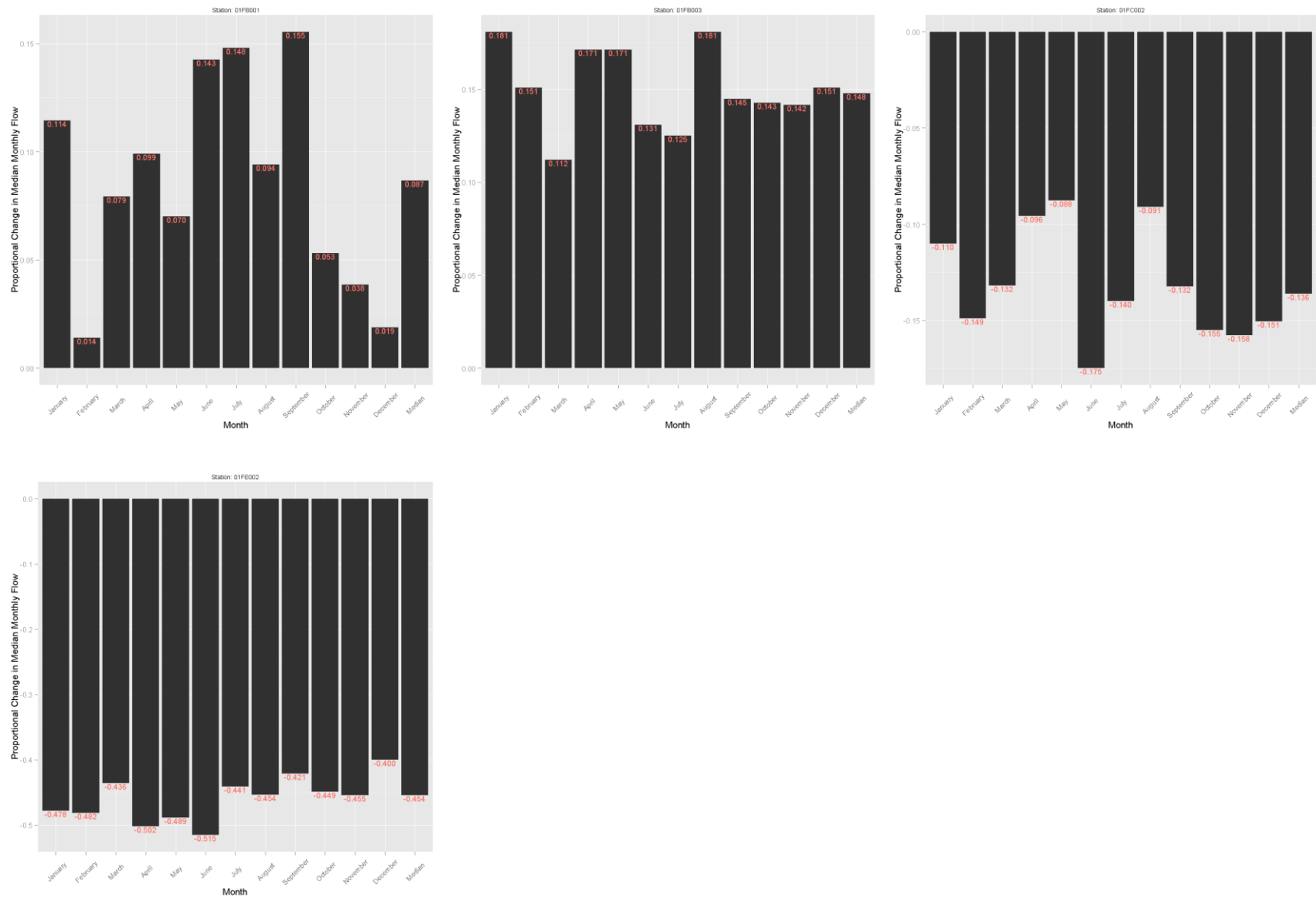


FIGURE. MONTHLY FLOW FOR RECENT VS. HISTORICAL TIME PERIODS IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED AND STATION.

01B - GULF OF ST. LAWRENCE AND NORTHERN BAY OF FUNDY, NEW BRUNSWICK.

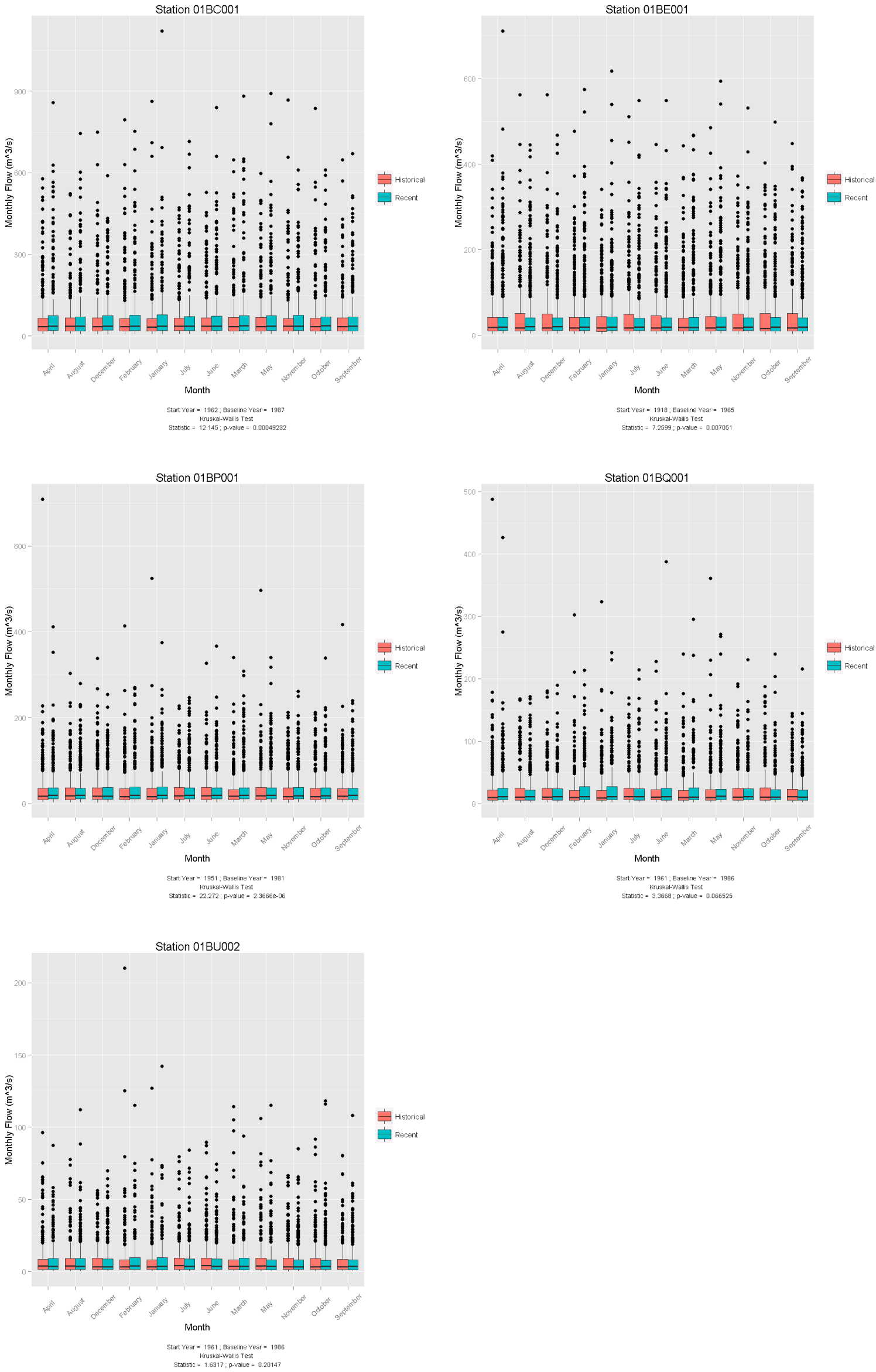
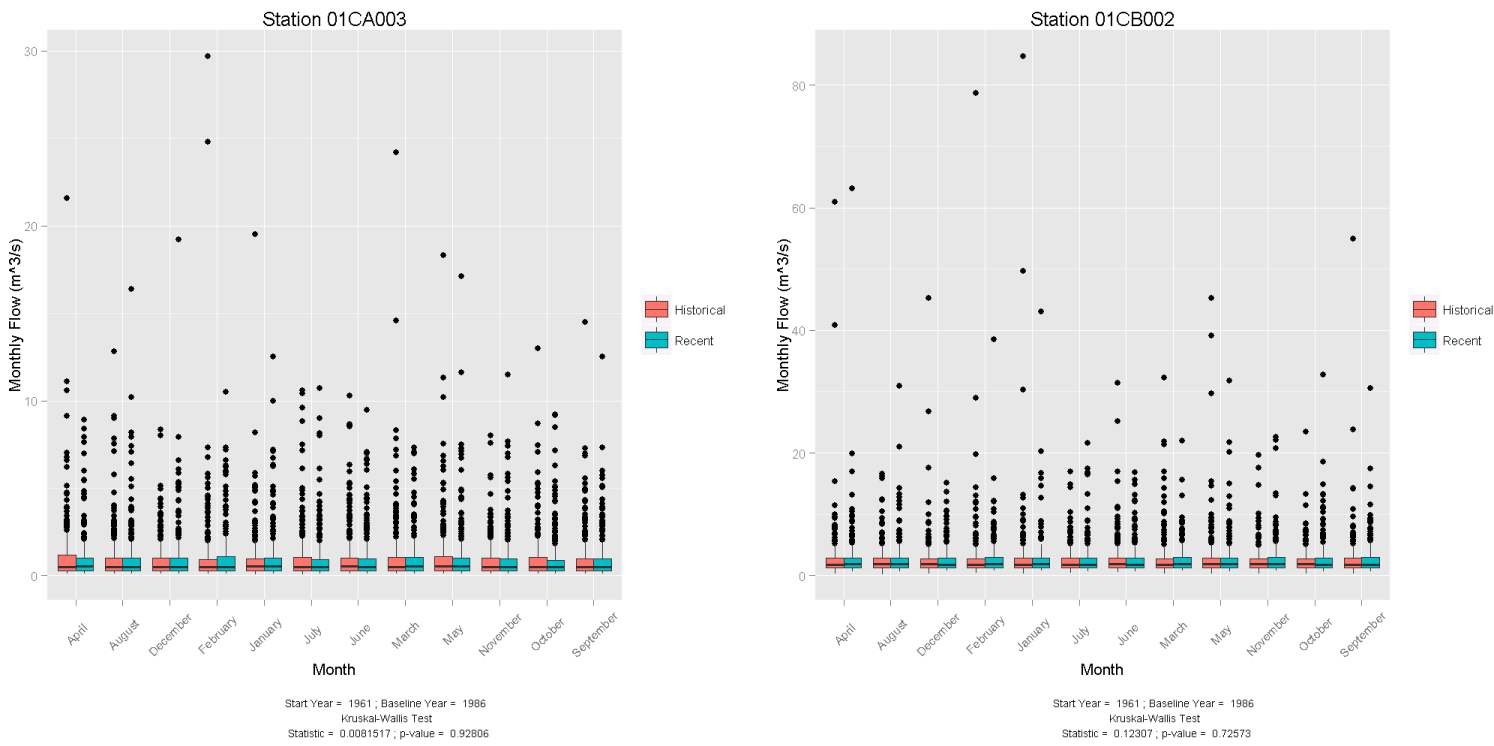


FIGURE. MONTHLY FLOW FOR RECENT VS. HISTORICAL TIME PERIODS IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED AND STATION.

01C - PRINCE EDWARD ISLAND



01D - BAY OF FUNDY AND GULF OF ST. LAWRENCE, NOVA SCOTIA

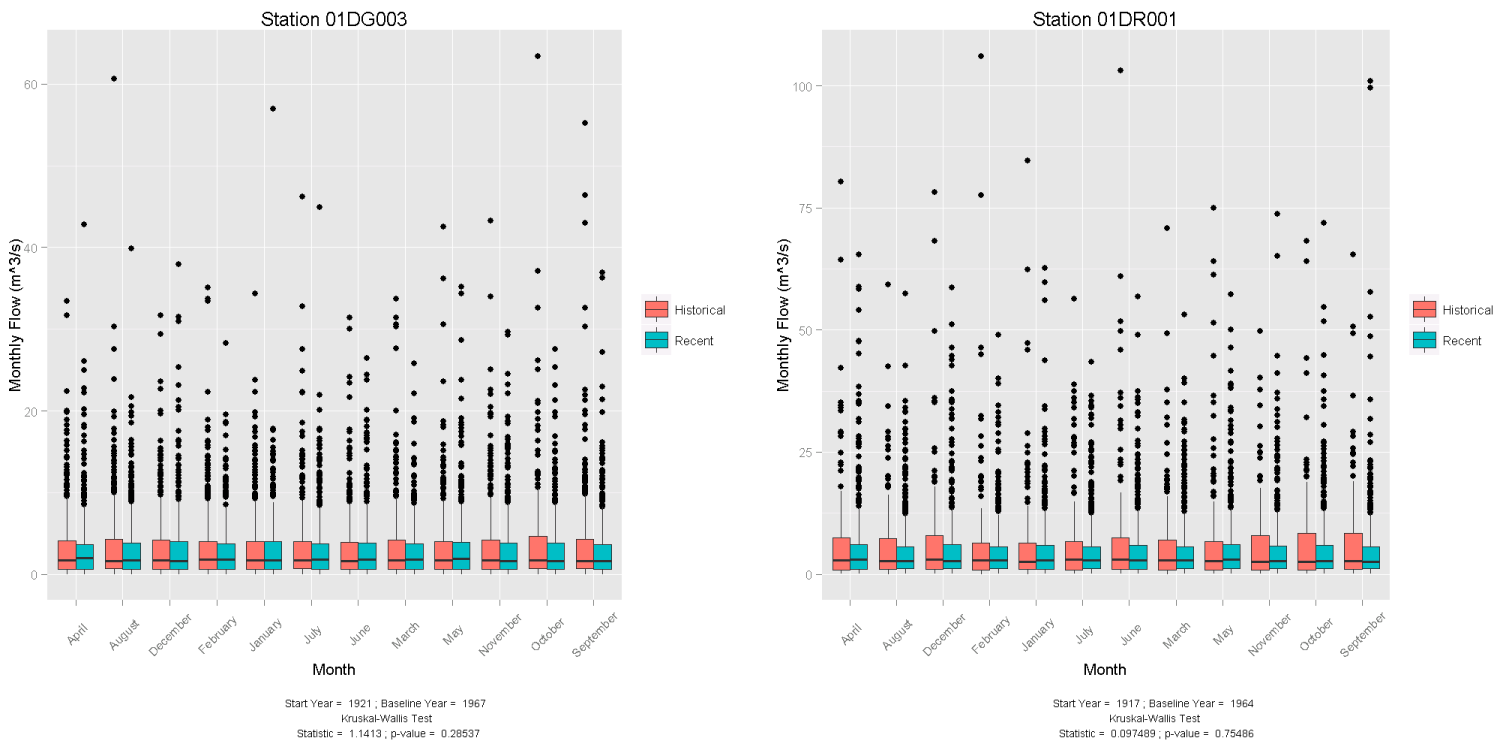


FIGURE. MONTHLY FLOW FOR RECENT VS. HISTORICAL TIME PERIODS IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED AND STATION.

01E - Southeastern Atlantic Ocean, Nova Scotia

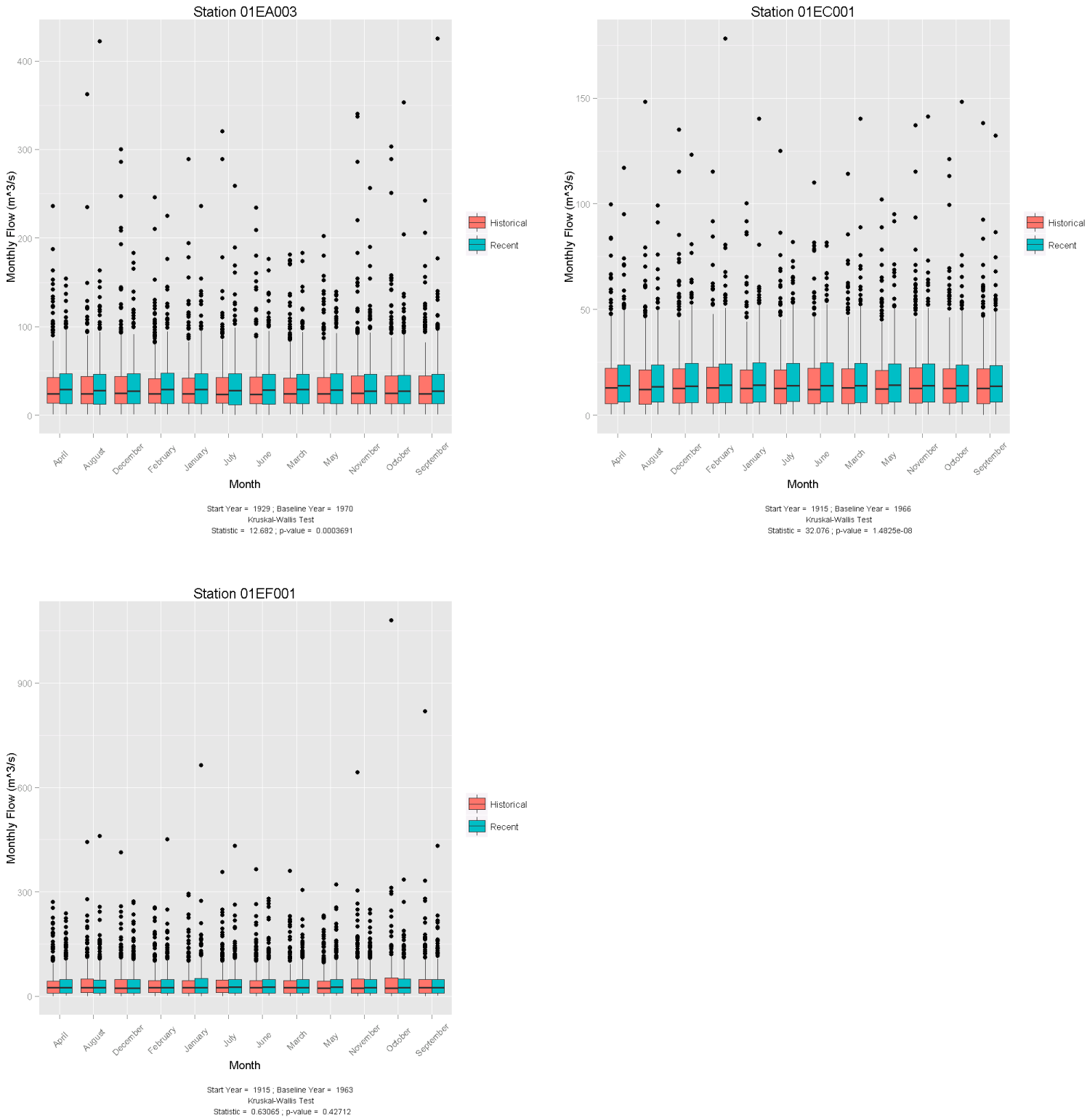
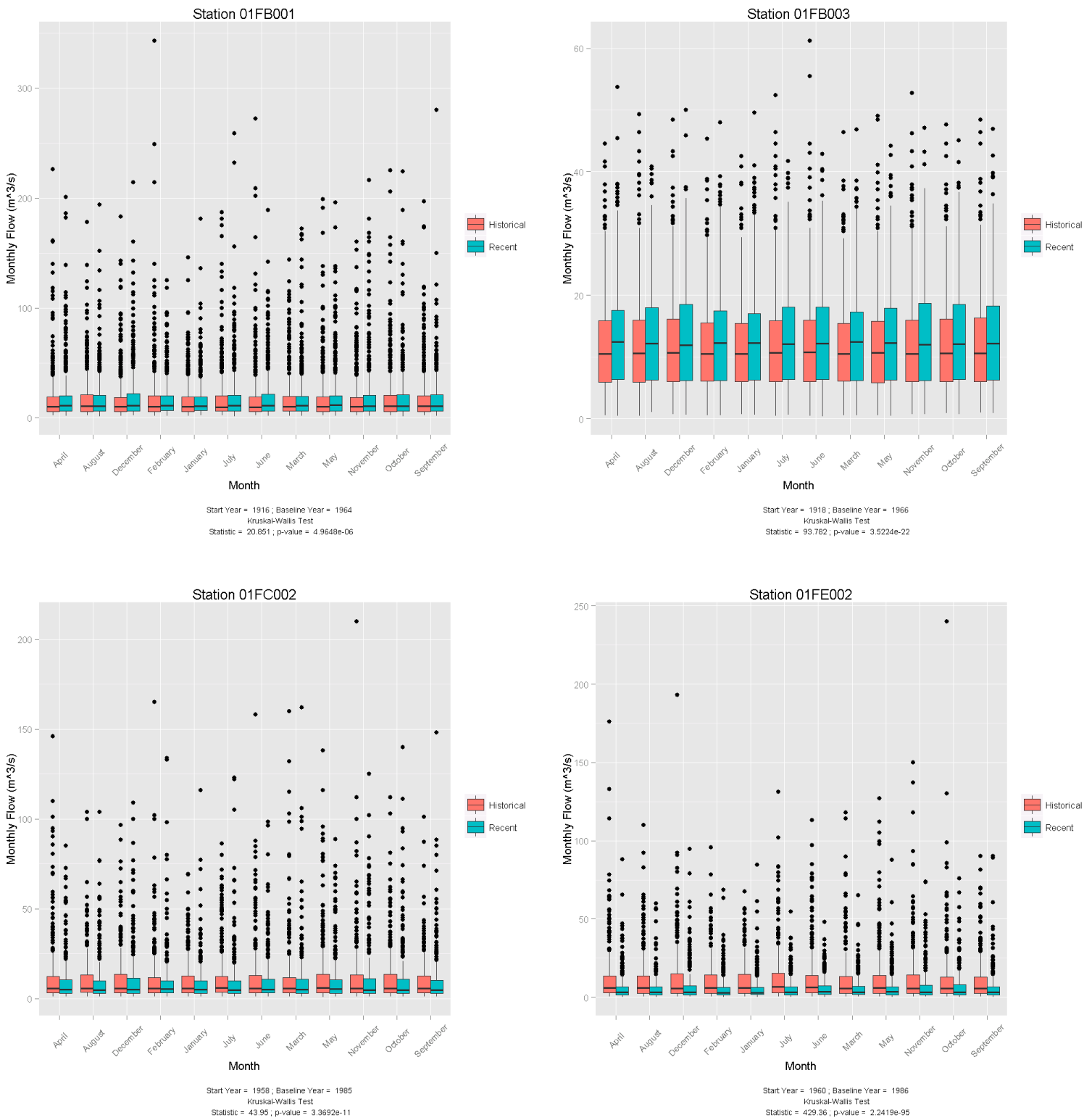


FIGURE. MONTHLY FLOW FOR RECENT VS. HISTORICAL TIME PERIODS IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED AND STATION.

01F - Cape Breton Island



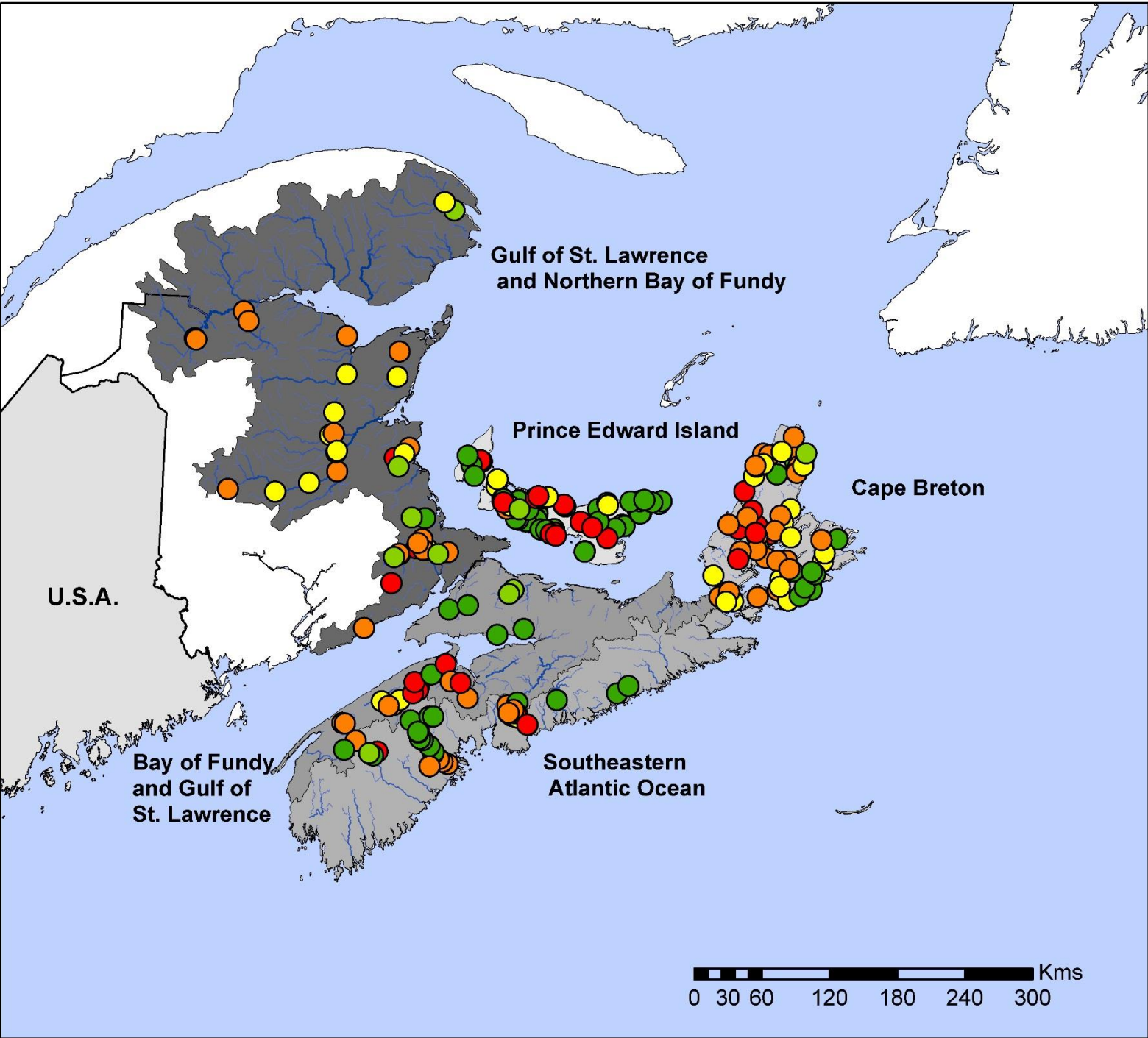
OVERALL WATER QUALITY HEALTH SCORING

Water Quality		Indicator		Sub-Basin					Basin
				01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F - Cape Breton Island	
		Exceedance of water quality thresholds. Weighted average of exceedances of three thresholds: water quality guidelines, 90th percentile and 77th percentile. Expressed as a proportion of total measurements. Reported for the last five years of monitoring.	Year	2011-2015	2011-2015	2011-2015	2011-2015	2011-2015	2011-2015
			Number of Stations	60	118	82	74	20	354
			Value	0.29	0.11	0.30	0.40	0.22	0.21
			Water Quality Health Category	Poor	Data deficient	Data deficient	Data deficient	Data deficient	Data deficient
			Water Quality Health Score	2	0	0	0	0	0
			Variance of annual water quality scores	Value	0.010	0.012	0.021	0.036	0.042
			Significant Mann-Kendal time-series test to determine directional trend in proportion of exceedance of water quality thresholds.	Time Period	2011-2015	2011-2015	2011-2015	2011-2015	2011-2015
			Trend	No trend	Significant Increasing trend in proportion of exceedances	No trend	No trend	No trend	Significant Increasing trend in proportion of exceedances

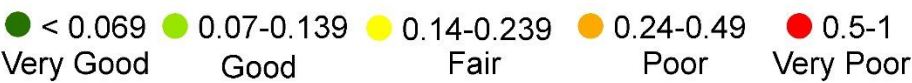
WATER QUALITY DATA SUFFICIENCY

Water Quality	Data Sufficiency Indicator	Sub-Basin					Basin
		01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F - Cape Breton Island	
	Total number of sub-sub-basins	21	5	18	17	9	70
	Year of earliest available monitoring	2006	1976	2000	1909	2000	1976
	Number of monitoring stations available for earliest monitoring	1	8	2	1	1	13
	Number of sub-sub-basins with earliest available monitoring stations	1	2	1	1	1	6
	Year of most recently available monitoring	2015	2015	2013	2014	2014	2015
	Number of monitoring stations available within last five years	60	138	20	83	74	375
	Number of sub-sub-basins within last five years	19	5	10	10	7	51
	Percentage of samples with at least 10 elements measured within last 5 years.	49.70%	0.00%	7.00%	3.50%	7.14%	0.28%
	Number of years of sampling in last 10 years	8	12	9	10	10	10
	Overall Data Sufficiency Category	Partially Sufficient	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient
	Data Sufficiency Score	1	0	0	0	0	0

Water quality in the Maritime Coastal Basin (2011-2015), Median value per site



Exceedance of Water Quality Thresholds
(Weighted Average of Proportion of Measurements
that exceed 75th, 90th Percentiles and Guidelines)



Source:
CABIN, 2015; Environment Canada, 2015;
Kouchibouguac National Park of Canada 2015;
Government of Prince Edward Island 2015;
Bedegque Bay Environmental Management Association 2015;
LaHave River Watershed Project 2015; Nova Scotia Environment 2015; Water For Life 2015;
Le ministère du Développement durable, de l'Environnement
et de la Lutte contre les changements climatiques 2015;
Shawnigan Residents Association 2015; Oathill Lake Coservation Society 2015;

MAP. EXCEEDANCE OF WATER QUALITY THRESHOLDS AS REPORTED FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED FOR THE FIVE MOST RECENT YEARS AVAILABLE

TABLE. WATER QUALITY IN THE MARITIME COASTAL WATERSHED BASED ON PROPORTION OF EXCEEDANCE OF THREE THRESHOLDS: PROVINCIAL WATER QUALITY GUIDELINES, 75TH PERCENTILE OF HISTORICAL DISTRIBUTION, AND 90TH PERCENTILE OF HISTORICAL DISTRIBUTION. REPORTED BY SUB-BASIN AND DATA SOURCE.

WSCSDA	Year	Source	Number of Contaminants Measured	Total Number of Sites	Number of Measurements	Total Number of Guidelines Exceedances	Proportion of Guideline Exceedance	Total Number of 90th Percentile Exceedances	Proportion of 90th Percentile Exceedance	Total Number of 75th Percentile Exceedances	Proportion of 75th Percentile Exceedance	Weighted Average Exceedance	5-Year Weighted Average
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	2015	CABIN	2	2	4	1	0.25	1	0.25	2	0.50	0.29	0.29
	2015	DELG_NB	12	14	161	17	0.11	62	0.39	86	0.53	0.27	
	2015	Kouch.NP	1	1	1	0	0.00	0	0.00	0	0.00	0.00	
	2014	CABIN	13	3	39	5	0.13	11	0.28	14	0.36	0.22	
	2014	DELG_NB	12	22	397	43	0.11	142	0.36	201	0.51	0.26	
	2014	Kouch.NP	10	3	28	5	0.18	8	0.29	10	0.36	0.24	
	2014	PWA	4	5	20	4	0.20	3	0.15	10	0.50	0.23	
	2013	MDDELCC	11	2	160	0	0.00	38	0.24	60	0.38	0.14	
	2013	DELG_NB	12	26	376	37	0.10	134	0.36	186	0.49	0.25	
	2013	PWA	4	17	72	25	0.35	30	0.42	47	0.65	0.42	
	2012	CABIN	2	2	4	0	0.00	0	0.00	1	0.25	0.04	
	2012	DELG_NB	12	18	415	43	0.10	152	0.37	215	0.52	0.26	
	2012	PWA	4	9	33	8	0.24	6	0.18	29	0.88	0.33	
01C - Prince Edward Island	2015	CABIN	2	19	287	2	0.01	3	0.01	6	0.02	0.01	0.11
	2014	ECGenie	2	21	191	19	0.10	20	0.10	44	0.23	0.12	
	2014	GovPEI	6	44	182	56	0.31	41	0.23	59	0.32	0.28	
	2013	ECGenie	1	2	2	0	0.00	0	0.00	0	0.00	0.00	
	2013	WFL	2	13	76	3	0.04	6	0.08	11	0.14	0.07	
	2013	CABIN	7	49	290	107	0.37	68	0.23	93	0.32	0.32	
	2012	ECGenie	2	11	11	0	0.00	0	0.00	0	0.00	0.00	
	2012	WFL	2	1	2	0	0.00	0	0.00	1	0.50	0.08	
	2012	CABIN	5	54	186	51	0.27	30	0.16	54	0.29	0.24	
	2011	ECGenie	2	13	17	0	0.00	0	0.00	0	0.00	0.00	
01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	2013	ECGenie	2	3	6	0	0.00	3	0.50	5	0.83	0.31	0.30
	2013	WFL	2	1	1658	0	0.00	0	0.00	0	0.00	0.00	
	2012	ECGenie	2	10	61	0	0.00	45	0.74	51	0.84	0.39	
	2012	CABIN	2	2	4	0	0.00	0	0.00	2	0.50	0.08	
	2012	WFL	12	1	6944	27	0.00	798	0.11	2254	0.32	0.09	
	2011	ECGenie	2	11	64	0	0.00	37	0.58	53	0.83	0.33	
	2011	CABIN	2	2	3	0	0.00	2	0.67	2	0.67	0.33	
	2011	WFL	12	1	5662	28	0.00	104	0.02	1593	0.28	0.06	

TABLE. WATER QUALITY IN THE MARITIME COASTAL WATERSHED BASED ON PROPORTION OF EXCEEDANCE OF THREE THRESHOLDS: PROVINCIAL WATER QUALITY GUIDELINES, 75TH PERCENTILE OF HISTORICAL DISTRIBUTION, AND 90TH PERCENTILE OF HISTORICAL DISTRIBUTION. REPORTED BY SUB-BASIN AND DATA SOURCE.

WSCSDA	Year	Source	Number of Contaminants Measured	Total Number of Sites	Number of Measurements	Total Number of Guidelines Exceedances	Proportion of Guideline Exceedance	Total Number of 90th Percentile Exceedances	Proportion of 90th Percentile Exceedance	Total Number of 75th Percentile Exceedances	Proportion of 75th Percentile Exceedance	Weighted Average Exceedance	5-Year Weighted Average
01E - Southeastern Atlantic Ocean, Nova Scotia	2014	CABIN	2	3	6	0	0.00	0	0.00	1	0.17	0.03	0.59
	2014	OLCS	2	5	10	1	0.10	8	0.80	10	1.00	0.48	
	2013	ECGenie	2	3	6	0	0.00	0	0.00	0	0.00	0.00	
	2013	BCAF	2	1	12	0	0.00	8	0.67	9	0.75	0.35	
	2013	LRWP	2	15	259	7	0.03	52	0.20	83	0.32	0.13	
	2013	OLCS	2	22	120	35	0.29	109	0.91	120	1.00	0.62	
	2013	SRA	2	13	150	14	0.09	90	0.60	108	0.72	0.37	
	2012	ECGenie	2	12	111	0	0.00	6	0.05	15	0.14	0.04	
	2012	EC	2	2	4	0	0.00	1	0.25	4	1.00	0.25	
	2012	EC.GENIE	10	3	66	13	0.20	1	0.02	12	0.18	0.13	
	2012	LRWP	13	16	434	39	0.09	75	0.17	161	0.37	0.16	
01F – Cape Breton Island	2014	CABIN	5	44	181	51	0.28	41	0.23	59	0.33	0.27	0.22
	2013	CABIN	1	2	2	0	0.00	0	0.00	0	0.00	0.00	
	2012	ECGenie	2	13	76	3	0.04	6	0.08	11	0.14	0.07	
	2012	CABIN	6	49	288	99	0.34	68	0.24	93	0.32	0.30	
	2011	ECGenie	3	1	3	0	0.00	0	0.00	1	0.33	0.06	
	2011	CABIN	2	11	11	0	0.00	0	0.00	0	0.00	0.00	

TABLE. PROPORTION OF EXCEEDANCE OF PROVINCIAL THRESHOLDS OF SELECTED PARAMETERS IN THE MARITIME COASTAL BASIN.

	01B - Gulf of St. Lawrence and Northern Bay of Fundy						01C - Prince Edward Island		
	New Brunswick			Quebec			Prince Edward Island		
Variable	Total measurements	Total exceedances	Ratio	Total measurements	Total exceedances	Ratio	Total measurements	Total exceedances	Ratio
Aluminum	33	0	0.00	16	1	0.06	64	7	0.11
Ammonia	0	0	0.00	N/A	N/A	N/A	1652	108	0.07
Arsenic	173	2	0.01	16	0	0.00	31	0	0.00
Cadmium	69	0	0.00	16	0	0.00	39	3	0.08
Chloride	200	1	0.01	9	0	0.00	604	50	0.08
Copper	0	0	0.00	16	0	0.00	31	0	0.00
Dissolved oxygen	184	4	0.02	8	0	0.00	4435	462	0.10
Iron	202	6	0.03	17	3	0.18	355	114	0.32
Lead	204	195	0.96	16	0	0.00	31	0	0.00
Mercury	0	0	0.00	N/A	N/A	N/A	N/A	N/A	N/A
Nickel	177	0	0.00	16	0	0.00	33	0	0.00
Nitrate	252	16	0.06	N/A	N/A	N/A	2937	52	0.02
Nitrite	0	0	0.00	N/A	N/A	N/A	N/A	N/A	N/A
Nitrogen	0	0	0.00	N/A	N/A	N/A	N/A	N/A	N/A
pH	269	1	0.00	9	0	0.00	4930	114	0.02
Phosphorus	242	43	0.18	N/A	N/A	N/A	4351	4058	0.93
Uranium	6	0	0.00	24	0	0.00	23	14	0.61
Zinc	204	0	0.00	16	0	0.00	31	0	0.00
TOTAL	2215	268		179	4		19547	4982	

	01D - Bay of Fundy and Gulf of St. Lawrence			01E - Southeastern Atlantic Ocean			01F - Cape Breton Island		
	Nova Scotia			Nova Scotia			Nova Scotia		
Variable	Total measurements	Total exceedances	Ratio	Total measurements	Total exceedances	Ratio	Total measurements	Total exceedances	Ratio
Aluminum	127	127	1.00	53	51	0.96	9	3	0.33
Ammonia	13	8	0.62	261	253	0.97	3	2	0.67
Arsenic	0	0	0.00	83	9	0.11	9	0	0.00
Cadmium	8	8	1.00	37	5	0.14	0	0	0.00
Chloride	197	3	0.02	1766	25	0.01	191	0	0.00
Copper	8	8	1.00	51	38	0.75	9	0	0.00
Dissolved oxygen	12370	0	0.00	2097	84	0.04	878	0	0.00
Iron	149	143	0.96	1277	1239	0.97	127	119	0.94
Lead	8	8	1.00	51	10	0.20	9	0	0.00
Mercury	0	0	0.00	0	0	0.00	0	0	0.00
Nickel	8	0	0.00	57	1	0.02	9	0	0.00
Nitrate	0	0	0.00	73	0	0.00	0	0	0.00
Nitrite	0	0	0.00	0	0	0.00	0	0	0.00
Nitrogen	0	0	0.00	0	0	0.00	0	0	0.00
pH	14596	0	0.00	3776	0	0.00	1188	2	0.00
Phosphorus	20	2	0.10	725	98	0.14	14	0	0.00
Uranium	52	24	0.46	262	20	0.08	57	23	0.40
Zinc	8	0	0.00	51	9	0.18	9	0	0.00
TOTAL	27564	331		10620	1842		2512	149	

FIGURE. ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL BASIN BY SUB-WATERSHED.

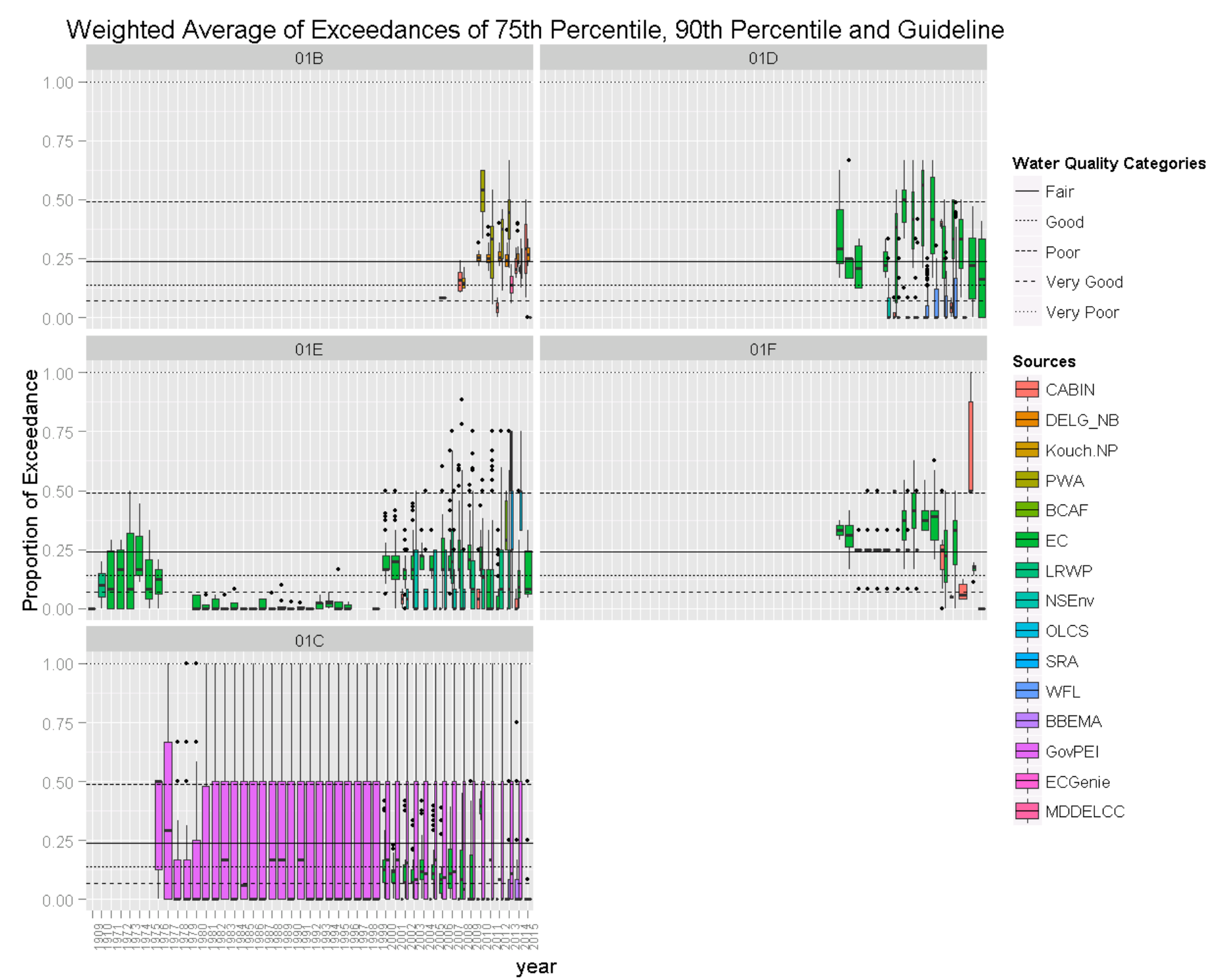


FIGURE. ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN QUÉBEC).

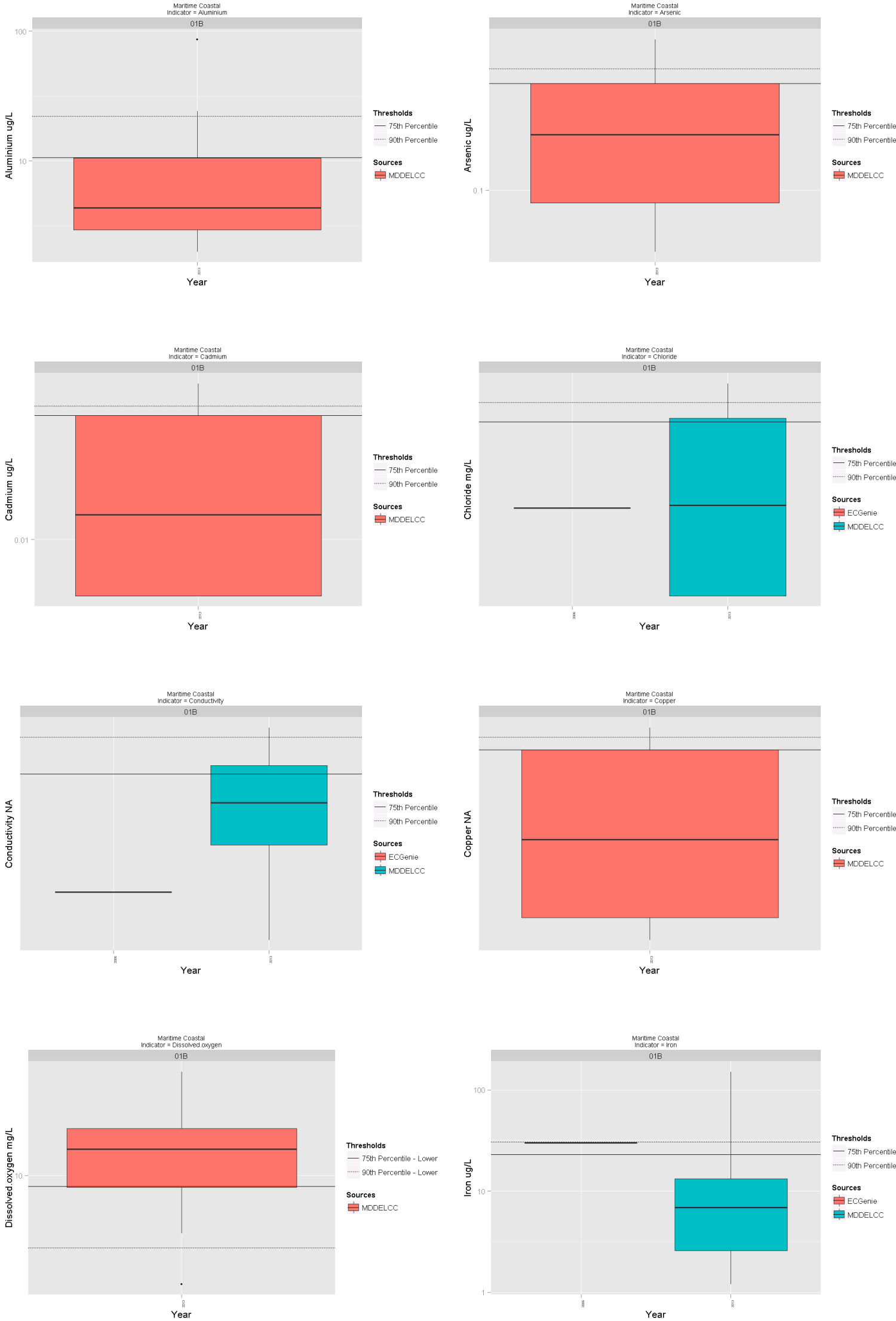


FIGURE. ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN QUÉBEC).

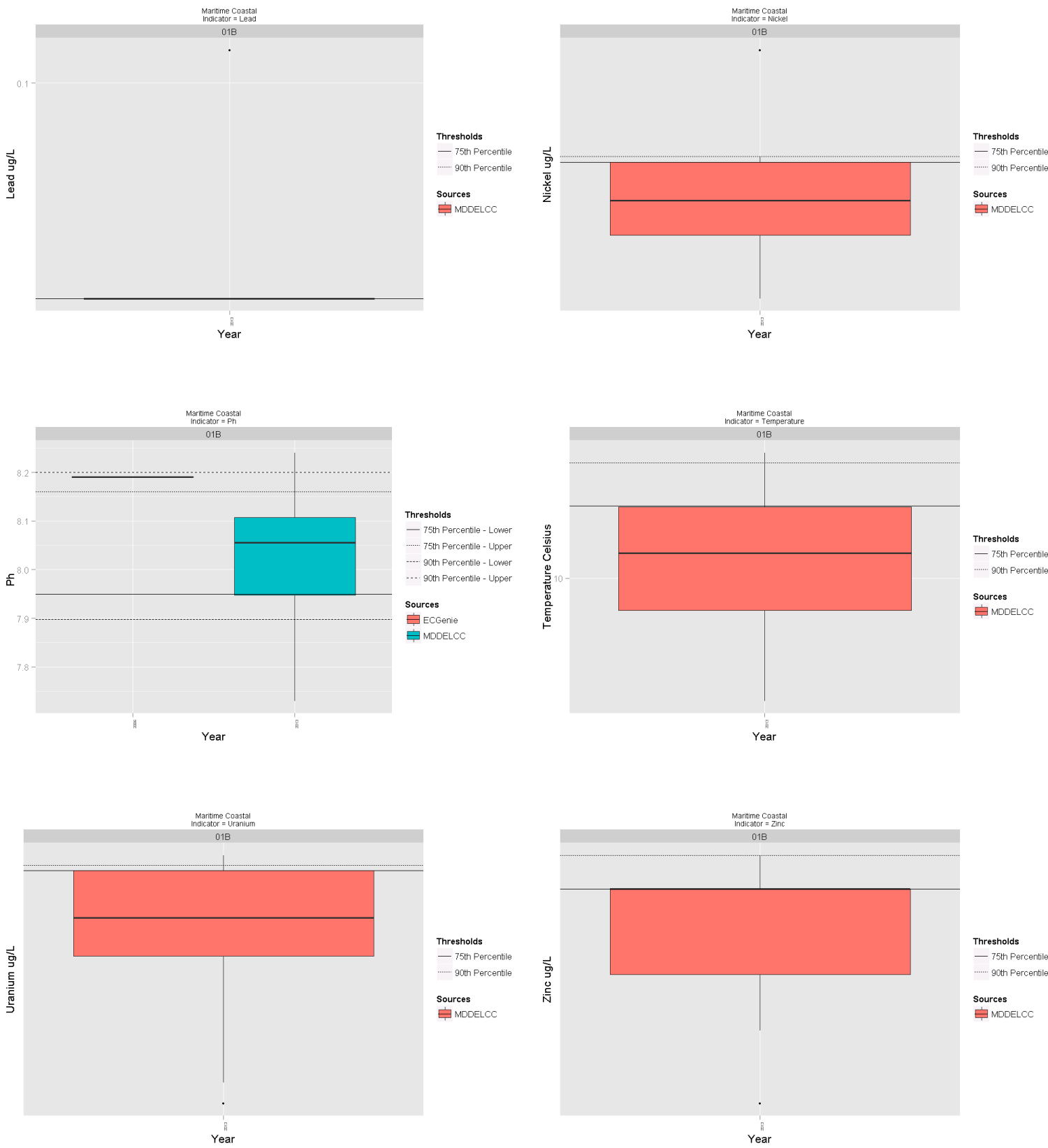


FIGURE. ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN NEW BRUNSWICK).

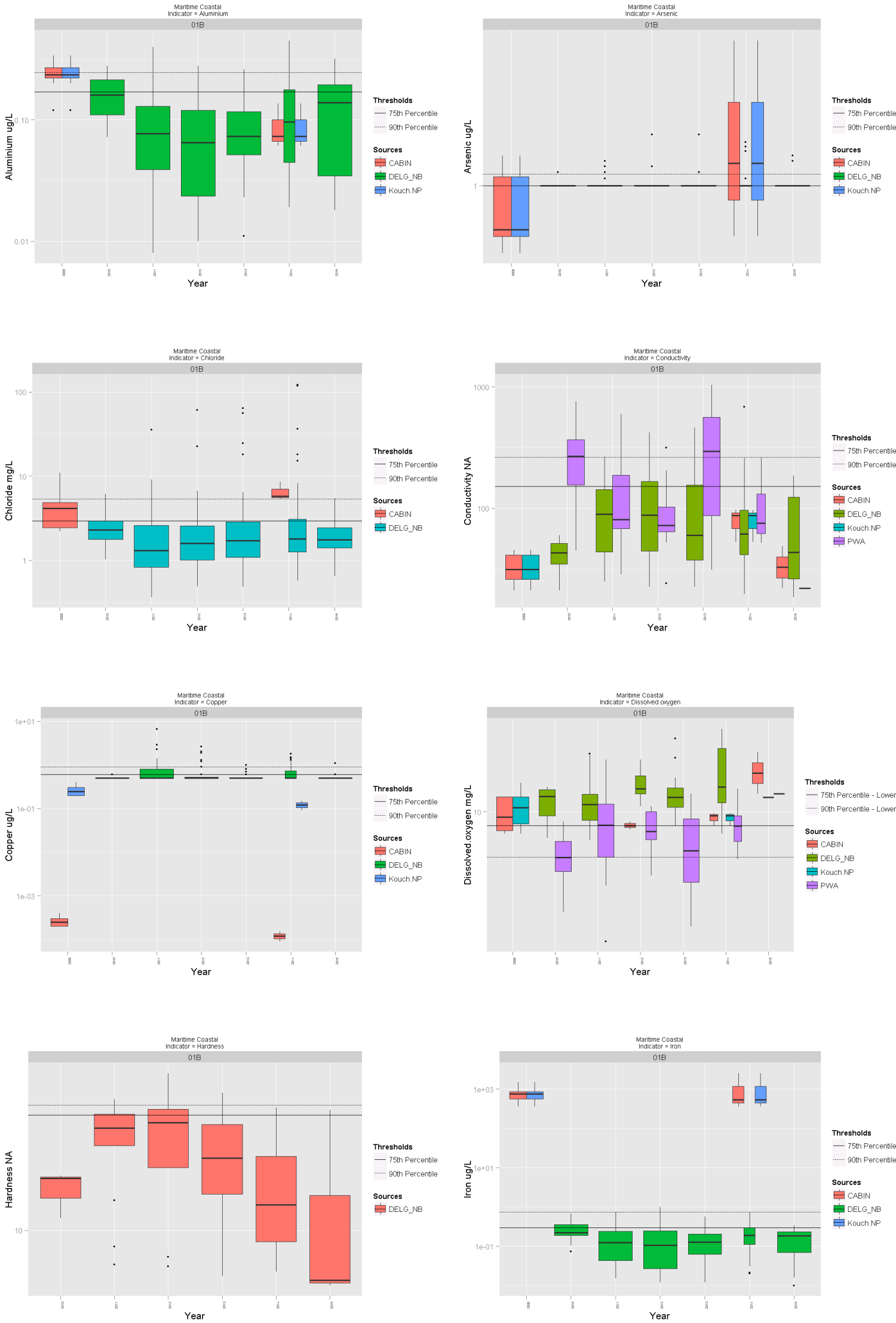


FIGURE. ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN NEW BRUNSWICK).

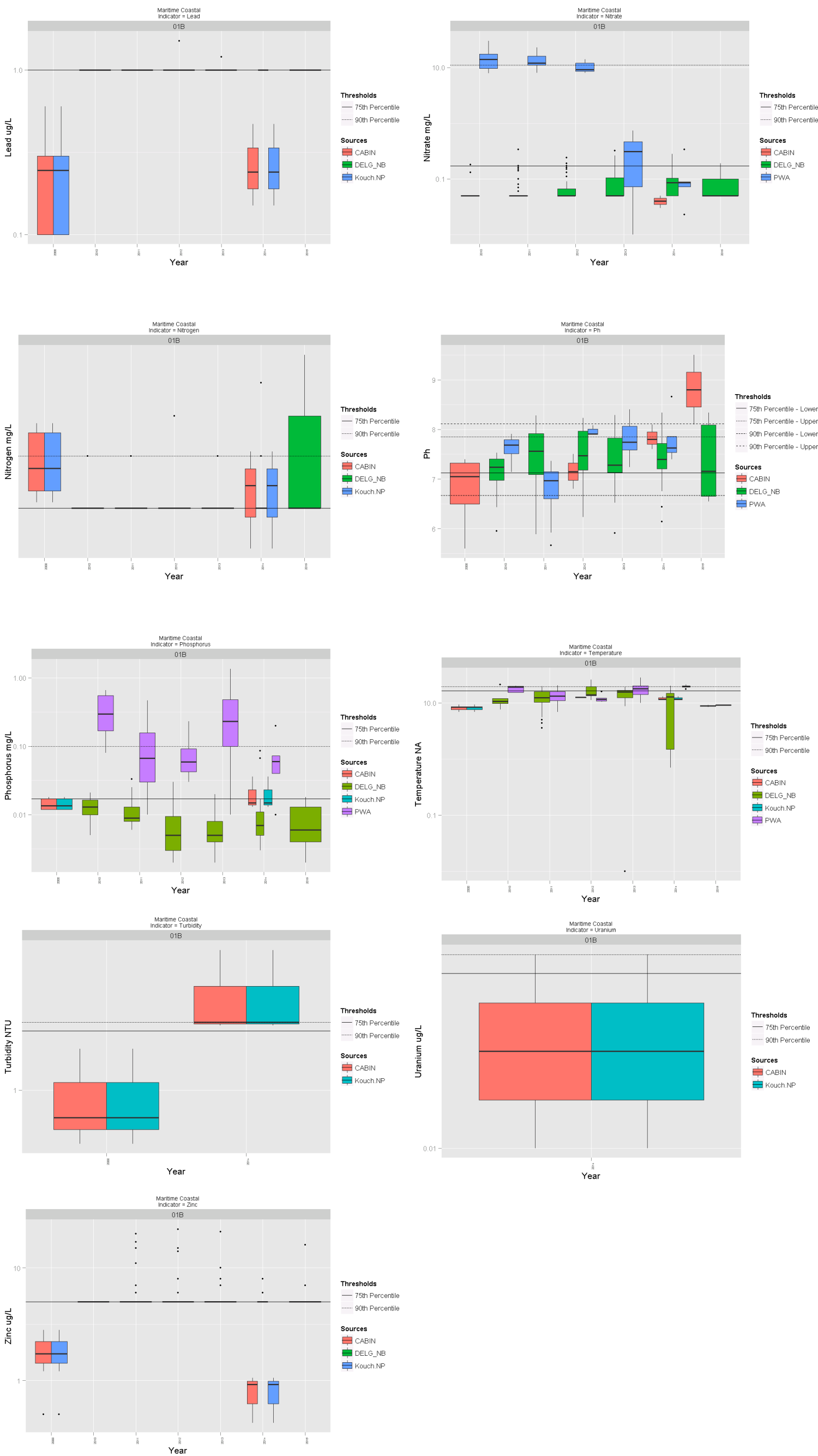


FIGURE. ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN PRINCE EDWARD ISLAND).

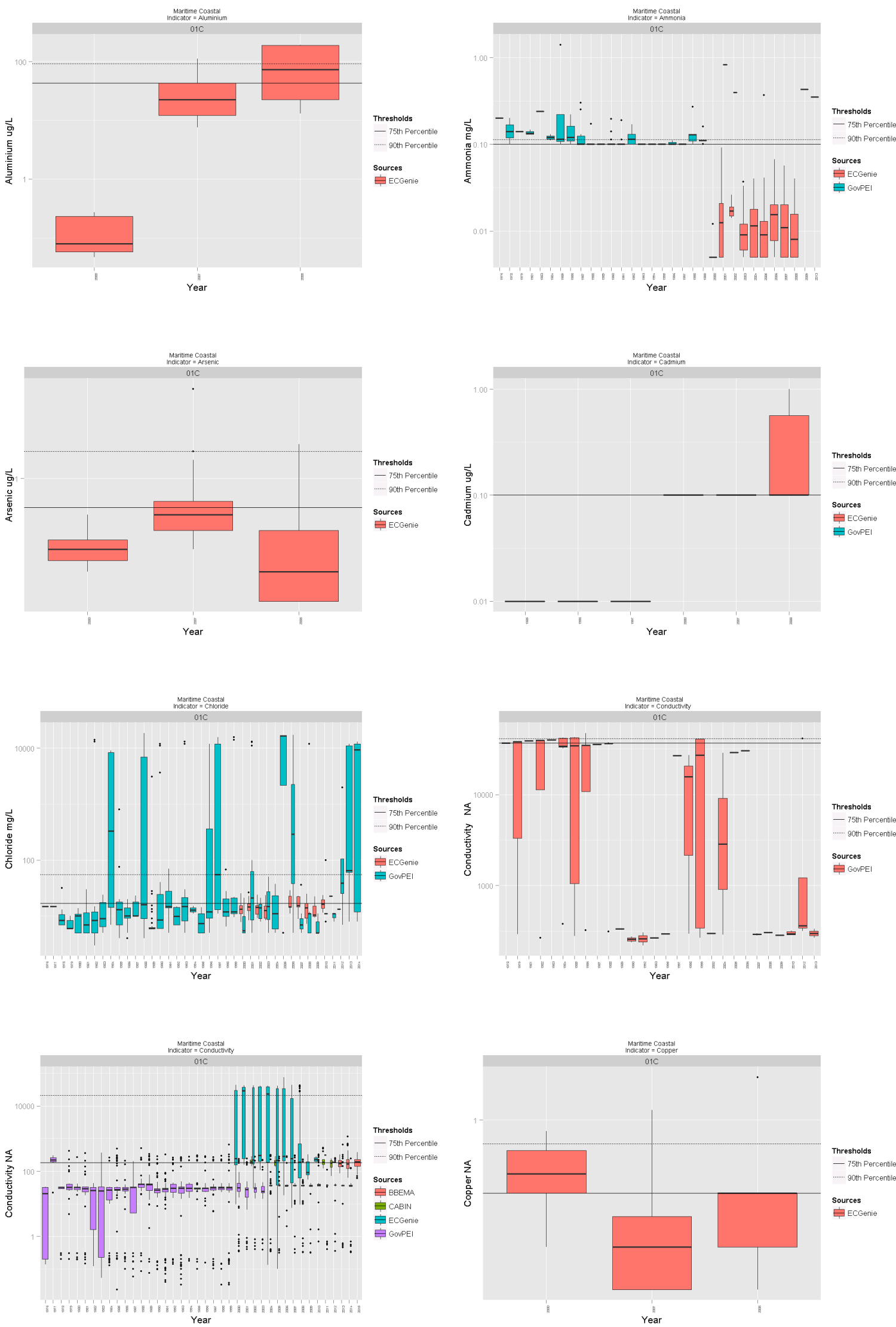


FIGURE. ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN PRINCE EDWARD ISLAND).



FIGURE ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN PRINCE EDWARD ISLAND).

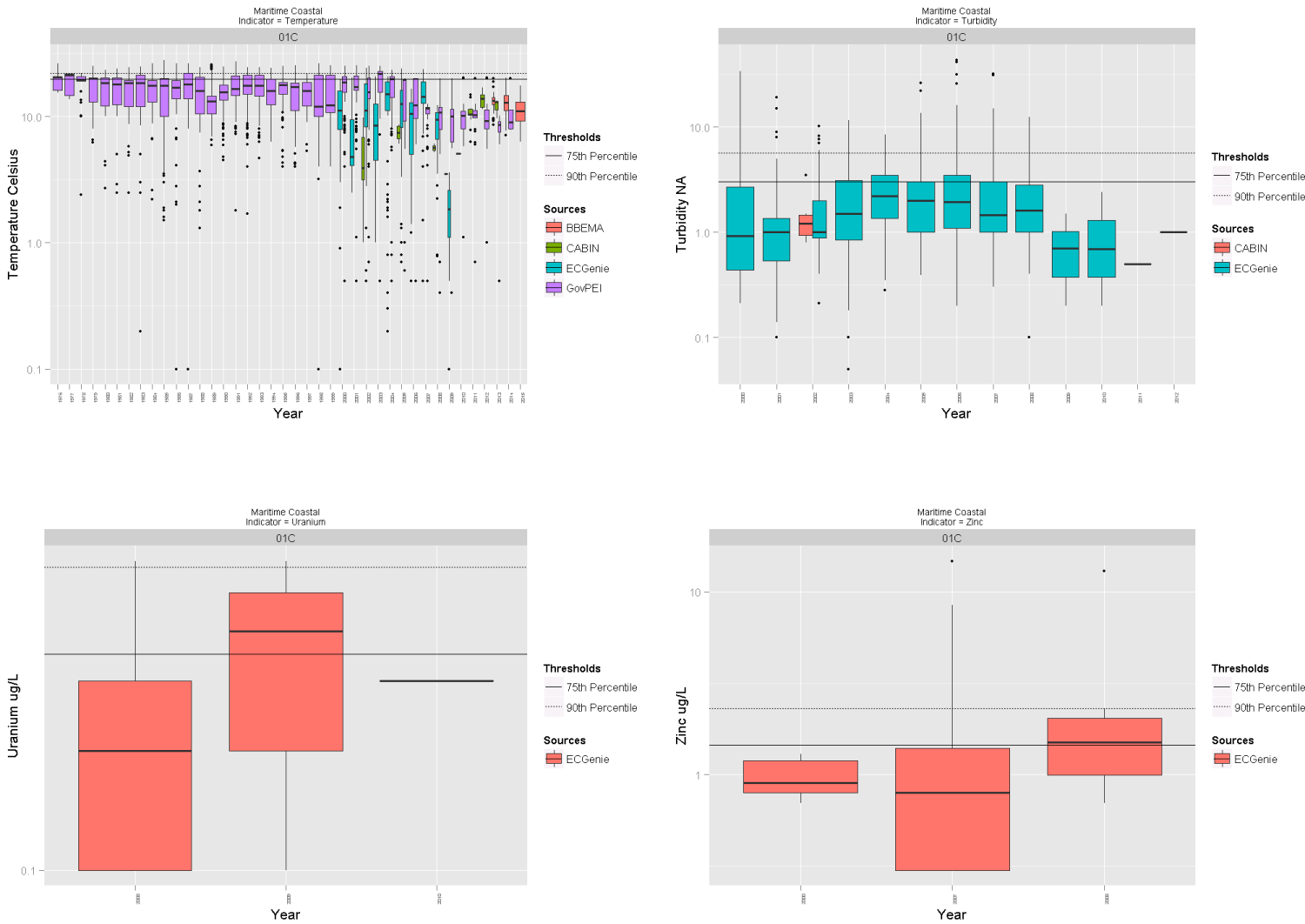


FIGURE ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN NOVA SCOTIA).

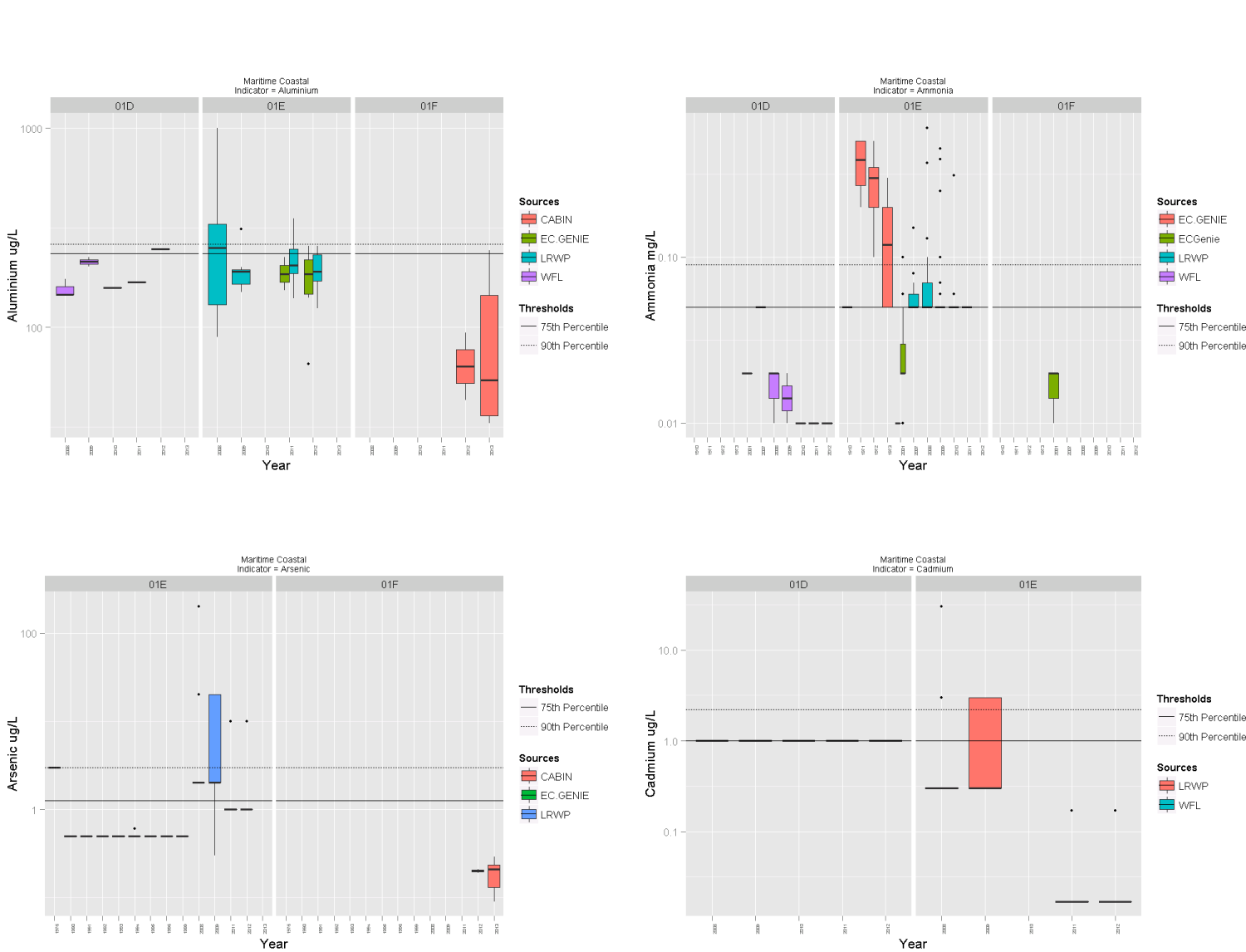


FIGURE ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN NOVA SCOTIA).

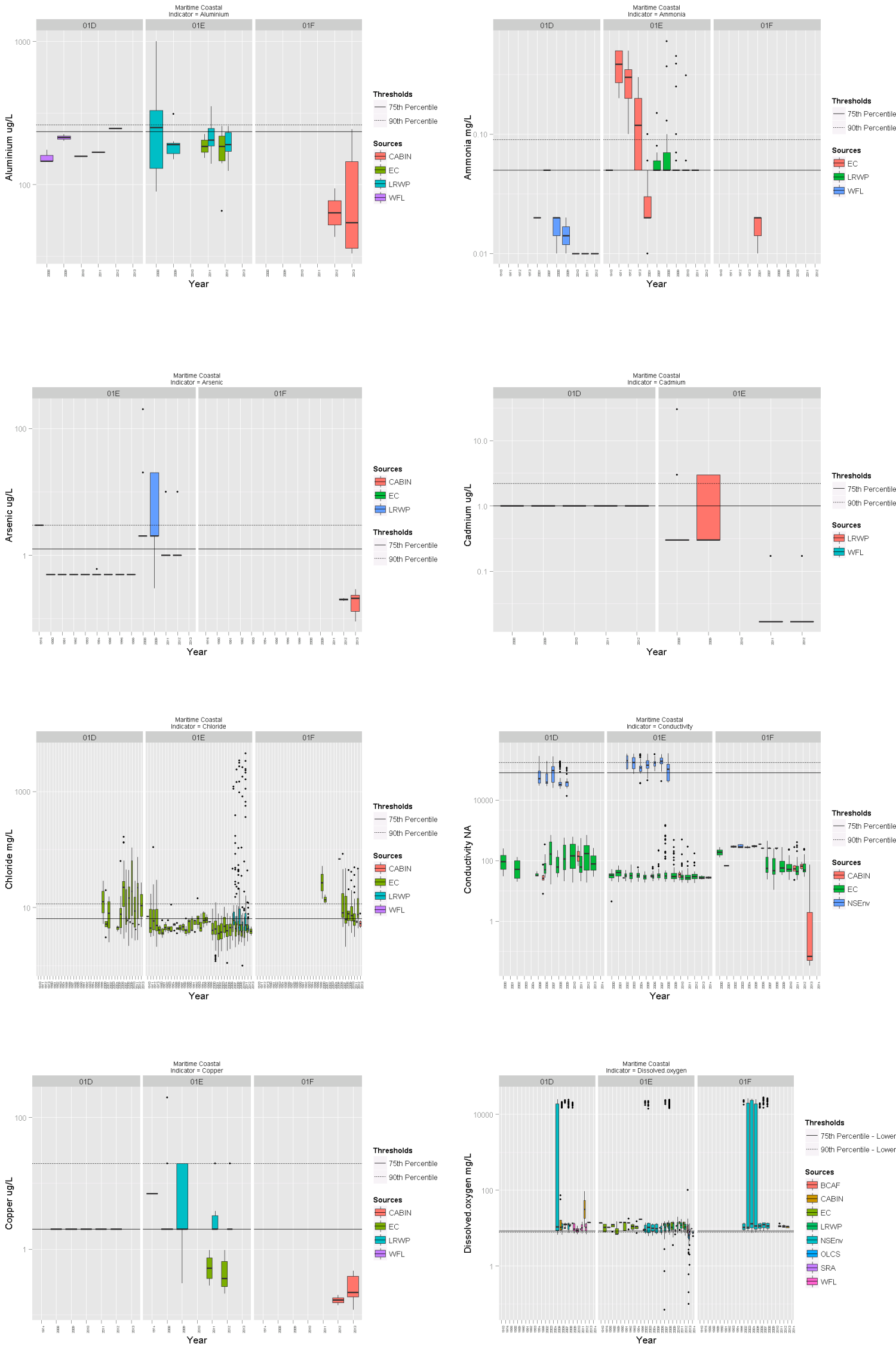


FIGURE ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN NOVA SCOTIA).

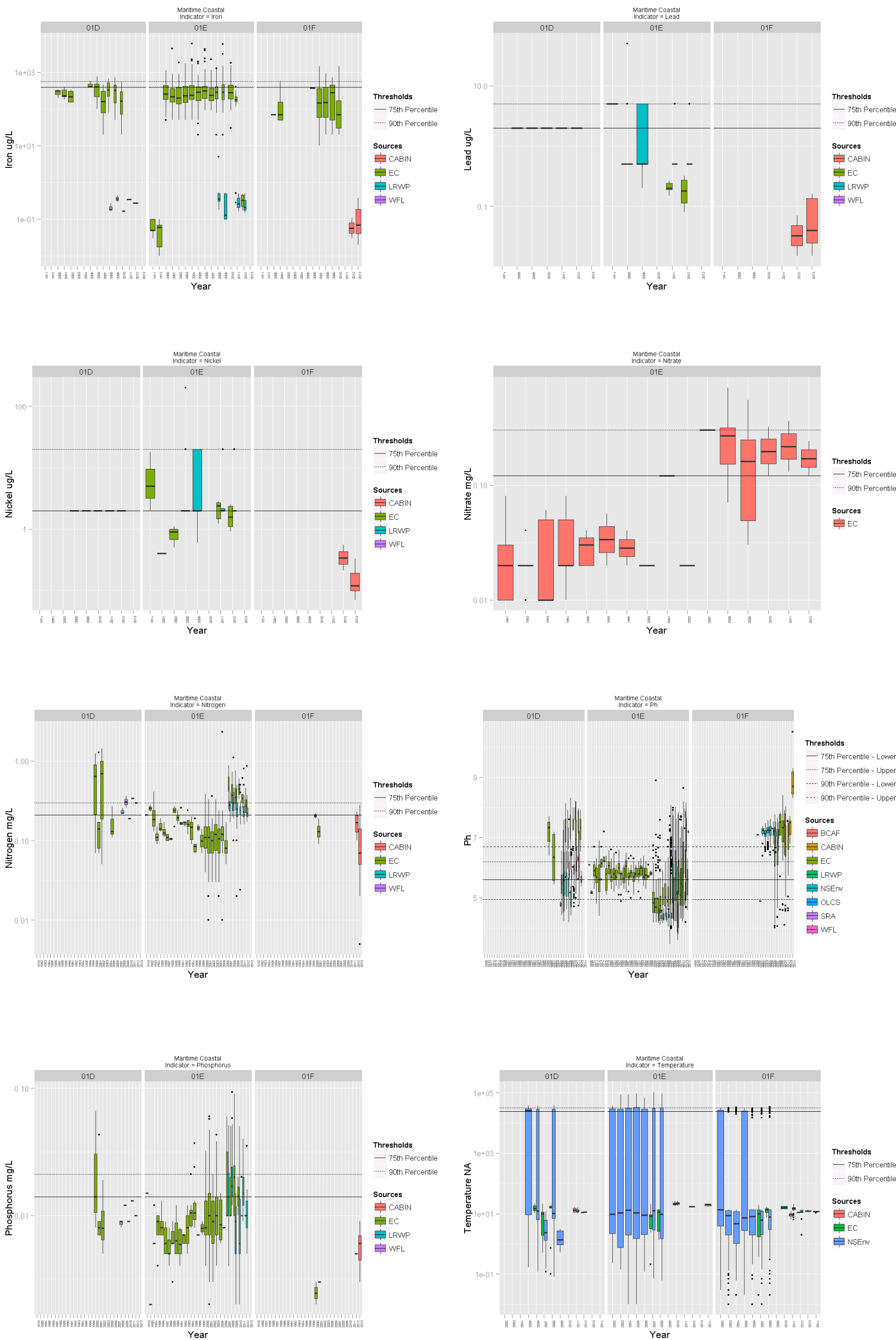


FIGURE ANALYSIS OF VARIANCE IN EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME FOR MONITORING STATIONS IN THE MARITIME COASTAL WATERSHED, BY CONTAMINANT (IN NOVA SCOTIA).

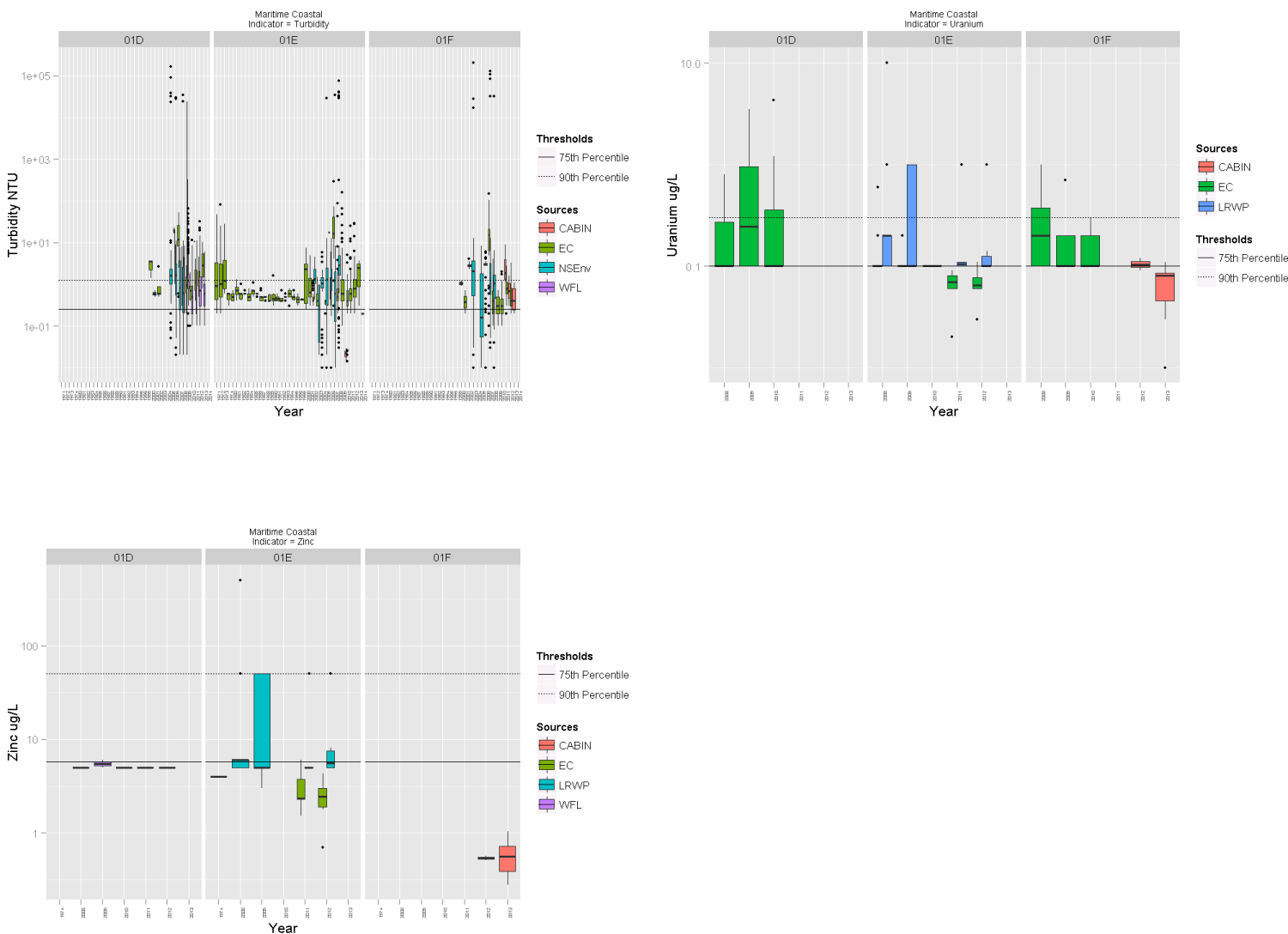


TABLE. RESULTS OF MANN-KENDALL NON-PARAMETRIC TREND ANALYSIS OF ANNUAL EXCEEDANCE OF WATER QUALITY THRESHOLDS OVER TIME IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED AND PROVINCE.

Watershed	Province	Source	Start Year	End Year	Number of Years	Number of Sites	Theil-Sen Slope	Mann-Ken Score	Mann-Ken p-value
Entire Watershed	All	All	2008	2015	7	66	0.00	-2	0.90
		CABIN	2008	2015	4	12	0.02	8	0.37
		DELG_NB	2010	2015	6	26	0.00	-2	0.85
		PWA	2010	2014	5	22	-0.05	-4	0.46
01B	New Brunswick / Quebec	All	2008	2015	7	66	0.00	-2.00	0.90
	New Brunswick	DELG_NB	2010	2015	6	26	0.00	-2.00	0.85
		PWA	2010	2014	5	22	-0.05	-4.00	0.46
	New Brunswick / Quebec	CABIN	2008	2015	4	12	0.02	8.00	0.37
	New Brunswick	Kouch.NP	2008	2015	3	6	NaN	NaN	NaN
01C	Prince Edward Island	All	1976	2015	40	220	0.00	-76.00	0.32
		BBEMA	2013	2015	3	22	NaN	NaN	NaN
		CABIN	2002	2013	8	24	0.00	0.00	NaN
		ECGenie	2000	2012	13	27	0.00	-5.00	0.81
		GovPEI	1976	2014	39	147	0.00	-22.00	0.78
01D	Nova Scotia	All	2000	2013	12	58	0.00	0.00	1.00
		WFL	2008	2013	6	1	0.00	0.00	NaN
		CABIN	2006	2012	3	12	NaN	NaN	NaN
		NSEnv	2005	2009	5	2	0.00	0.00	NaN
		ECGenie	2000	2013	12	45	0.00	4.00	0.87
01E	Nova Scotia	All	1909	2014	41	155	0.00	-79.00	0.83
		BCAF	2013	2013	1	1	NaN	NaN	NaN
		OLCS	2013	2014	2	23	NaN	NaN	NaN
		SRA	2013	2013	1	13	NaN	NaN	NaN
		EC	2007	2012	6	2	0.00	0.00	1.00
		CABIN	2002	2014	4	15	0.00	0.00	1.00
		NSEnv	2002	2008	7	2	0.00	-6.00	0.21
		ECGenie	2000	2013	14	82	0.00	-31.00	0.08
		EC.GENIE	1971	2012	33	6	0.00	137.00	0.13
		LRWP	1909	2013	9	16	0.00	70.00	0.84
01F	Nova Scotia	All	2000	2014	15	80	0.00	-3.00	0.92
		NSEnv	2002	2008	7	1	0.00	0.00	NaN
		ECGenie	2000	2012	9	67	0.00	-4.00	0.85

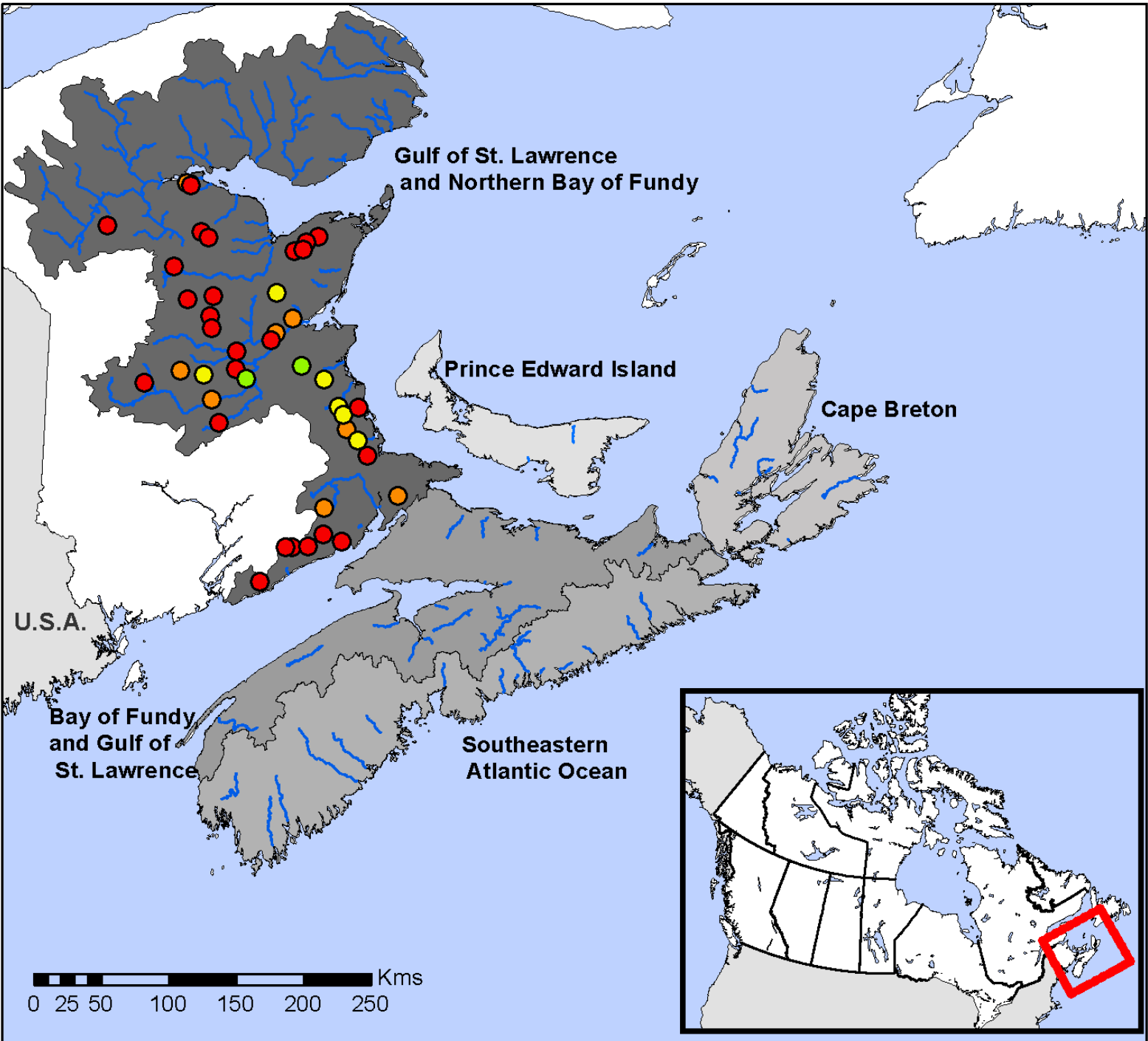
OVERALL FISH HEALTH SCORING

Fish	Indicator			Sub-Watershed					Basin
				01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F - Cape Breton Island	
	Change in Native Fish Species Richness		Period of Study	2007-2015	-	-	1978-2009	-	1978-2015
			Number of Sites	84	-	-	64	-	148
		Presence of statistically significant decline in median species richness for the basin.	Trend	None	-	-	-	-	None
		Presence of statistically significant decline in total species richness for the basin.	Trend	None	-	-	-	-	None
			Fish Health Category	Good	-	-	Data Deficient	-	Data Deficient
			Fish Health Score	4	-	-	0	-	0

FISH DATA SUFFICIENCY

		Sub-Watershed					Basin
Data Sufficiency Indicator		01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F - Cape Breton Island	
Fish	Total number of sub-sub-basins	21	-	-	17	-	38
	Year of earliest available monitoring	2007	-	-	1978	-	1978
	Number of sampling locations available for earliest monitoring	10	-	-	11	-	21
	Number of sub-sub-basins with earliest available sampling locations	8	-	-	2	-	10
	Earliest year of continuous monitoring	2008	-	-	1980	-	1980
	Number of sampling locations available for first year of continuous monitoring	15	-	-	25	-	40
	Number of sub-sub-basins for first year of continuous monitoring	10	-	-	2	-	12
	Year of most recently available monitoring	2015	-	-	2009	-	2015
	Number of monitoring stations available within last five years	60	-	-	0	-	60
	Number of sub-sub-basins within last five years	10	-	-	0	-	10
	Number of years of sampling in last 10 years	8	-	-	0	-	8
	Overall Data Sufficiency Category	Partially Sufficient	-	-	Insufficient	-	Data Deficient
	Data Sufficiency Score	1	-	-	0	-	0

Fish in the Maritime Coastal basin
(species present 2010-2015)



Median number of observed native fish species

- 9 + ● 6 - 9 ● 4 - 5 ● 2 - 4 ● 1 - 2

Source:
Department of Natural Resources, New Brunswick (2015)

FIGURE.NON-PARAMETRIC ANALYSIS OF VARIANCE IN FISH SPECIES RICHNESS IN THE MARITIME COASTAL, BY SUB-WATERSHED.

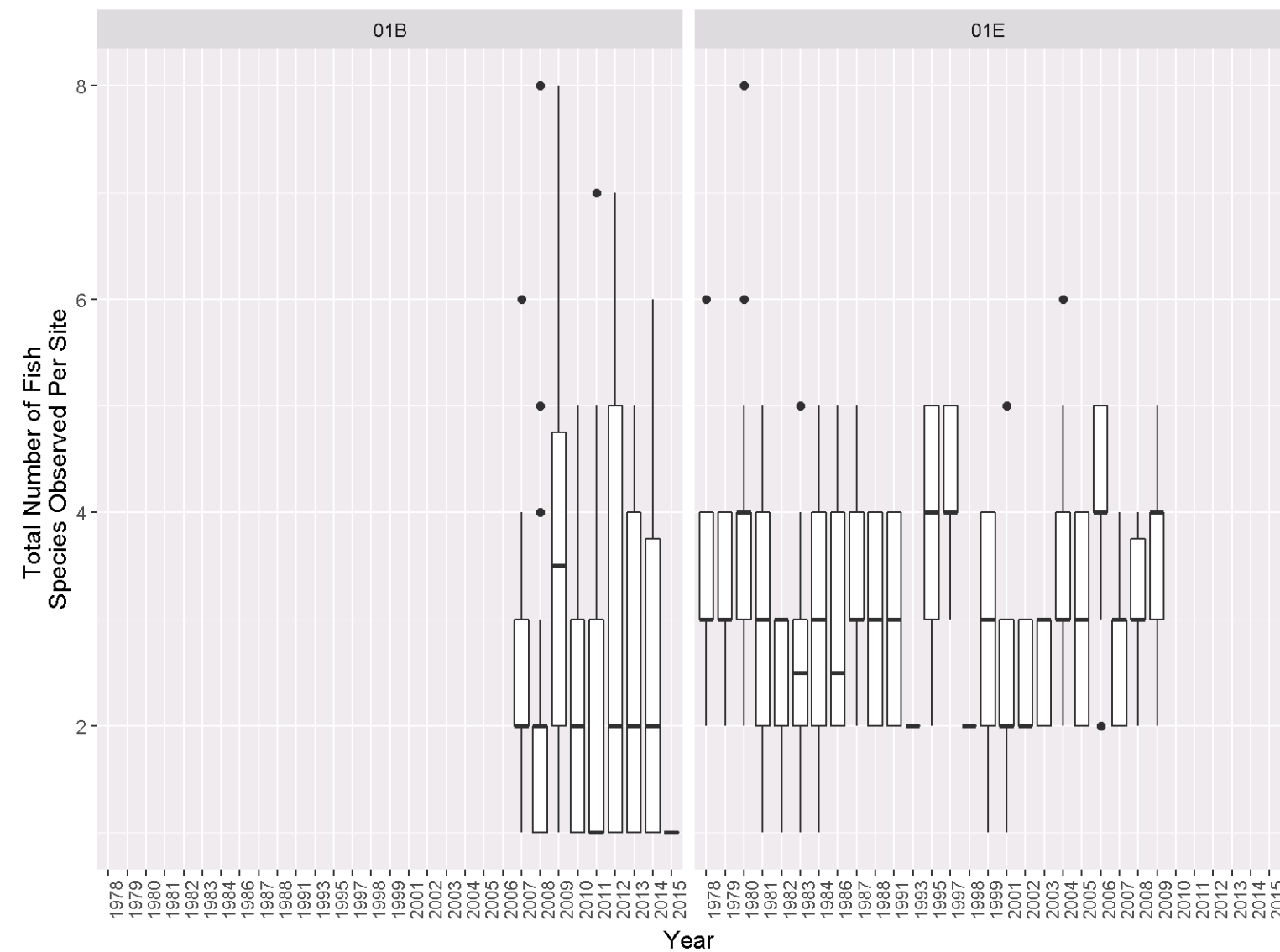


FIGURE.TIME-SERIES OF NATIVE FISH SPECIES RICHNESS IN THE MARTIIME COASTAL WATERSHED.

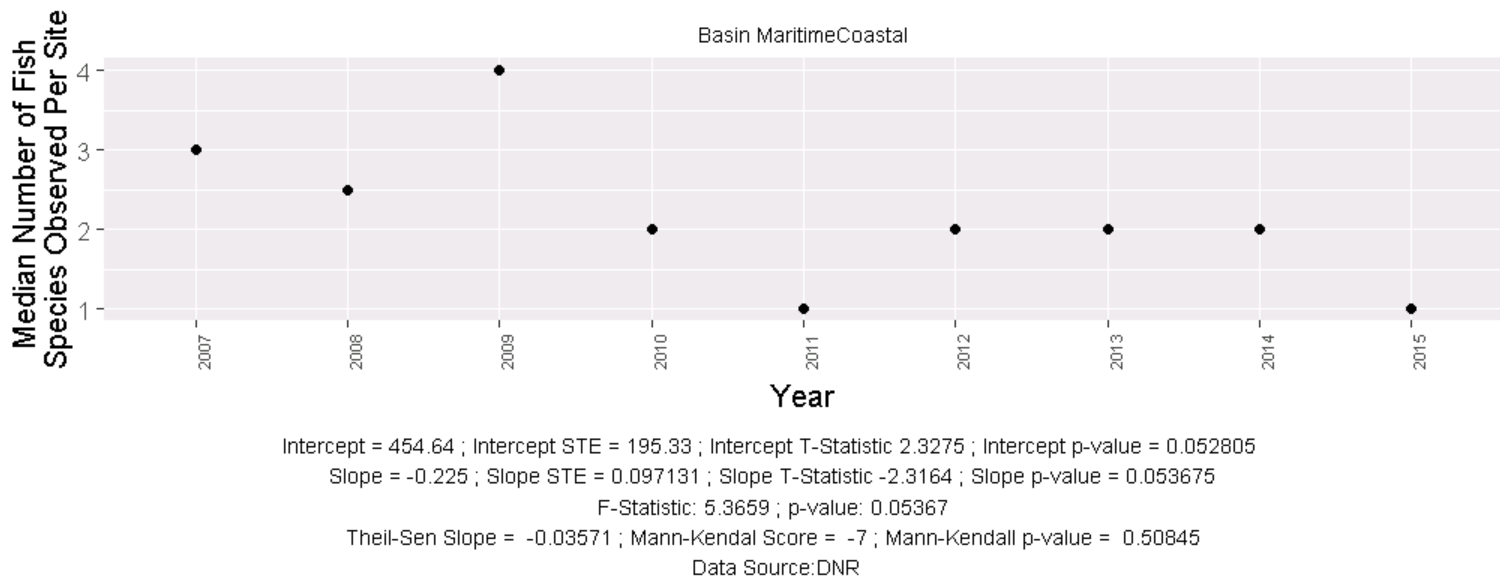


FIGURE.TIME-SERIES OF NATIVE FISH SPECIES RICHNESS IN 01B - GULF OF ST. LAWRENCE AND NORTHERN BAY OF FUNDY, NEW BRUNSWICK.

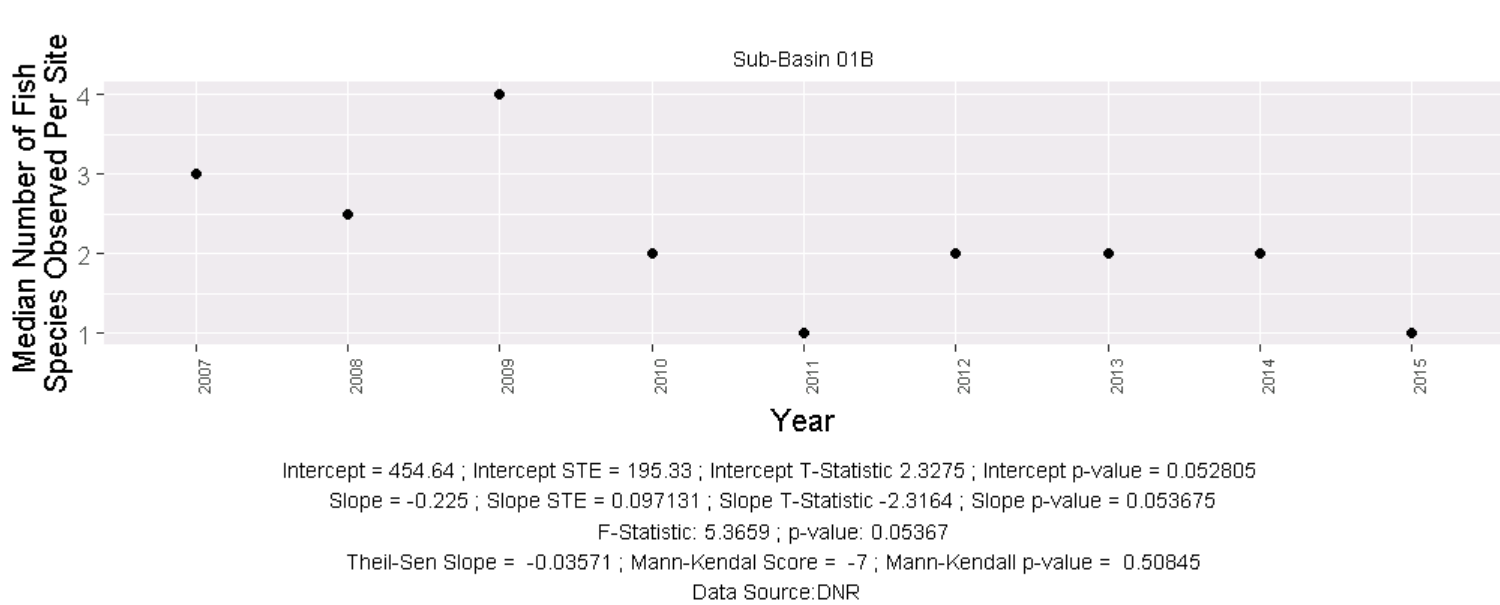


FIGURE.TIME-SERIES OF NATIVE FISH SPECIES RICHNESS IN THE 01E - SOUTHEASTERN ATLANTIC OCEAN, NOVA SCOTIA

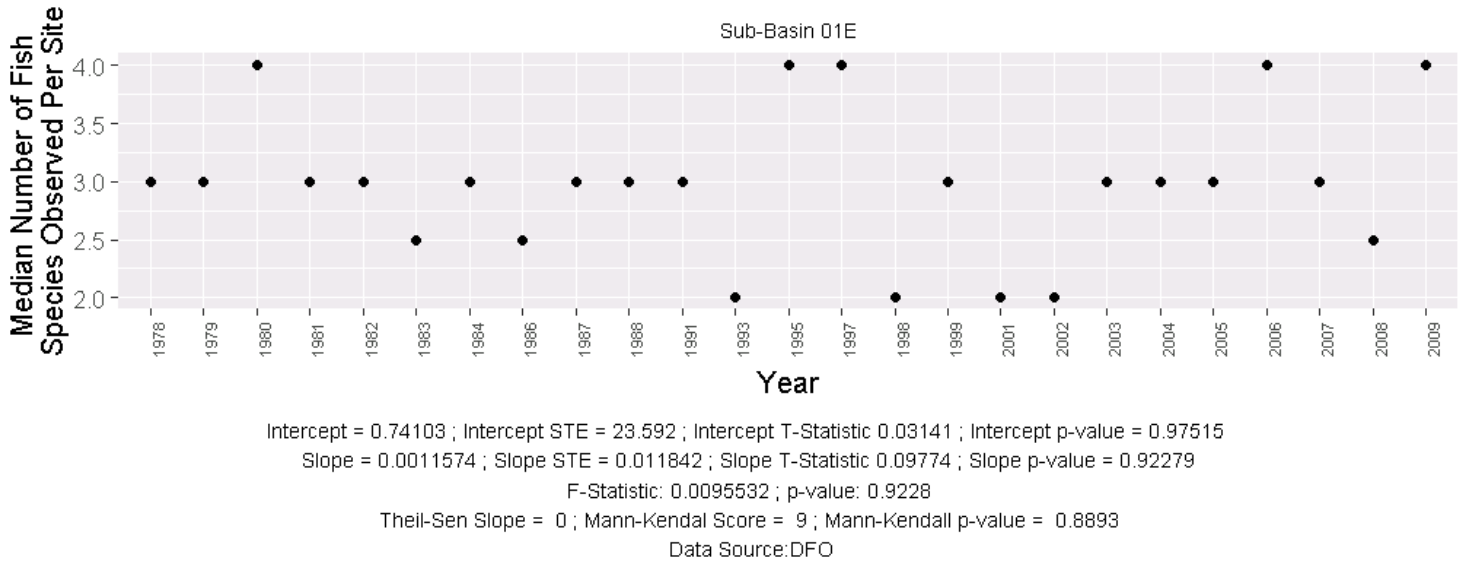


TABLE . RESULTS OF MANN-KENDALL NON-PARAMETRIC TREND ANALYSIS OF FISH SPECIES RICHNESS OVER TIME IN THE MARITIME COASTAL WATERSHED BY SUB-WATERSHED.

Analysis	Source	WSCSDA	Start Year	Theil-Sen Slope	Mann-Ken Score	Mann-Ken p-value
Median Richness Analysis	DNR; DFO	Maritime Coastal	2008	-0.291666667	-3	0.61335
	DNR	01B	2007	-0.035714286	-7	0.50845
	DFO	01E	1978	0	9	0.8893
Total Richness Analysis	DNR; DFO	Maritime Coastal	2007	0	-1	1
	DNR	01B	2007	0	-1	1
	DFO	01E	1978	-	-	-

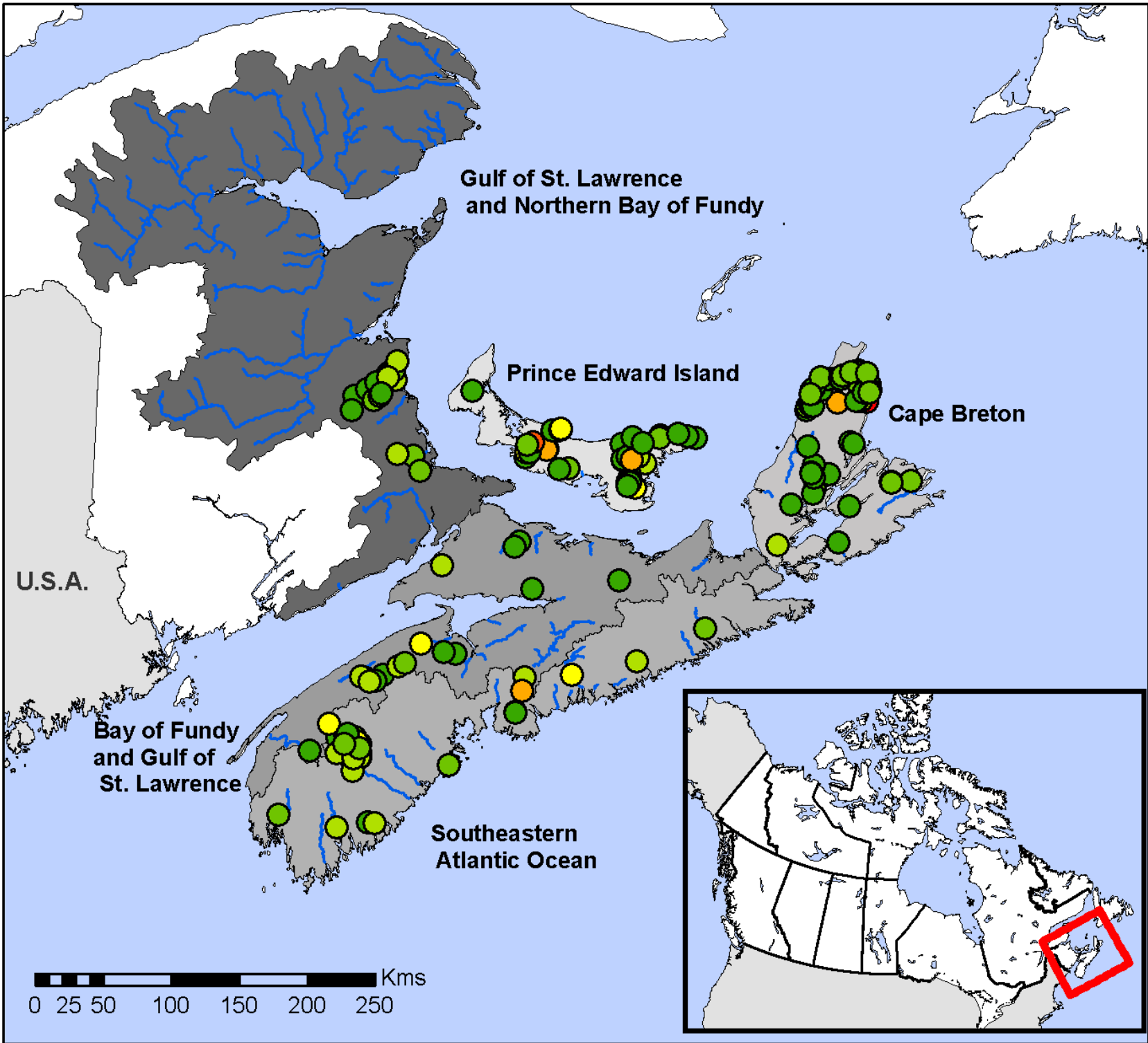
OVERALL BENTHIC HEALTH SCORING

Benthic Macro-Invertebrates	Indicator			Sub-Watershed					Watershed
				01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F – Cape Breton Island	
	Index of benthic community composition based on sensitivity to disturbance	Median Hilsenhoff Biotic Index (HBI) score for the basin, based on the five most recent years of monitoring.	Year	2009-2014	2009-2014	2008-2013	2009-2014	2009-2014	2008-2014
			Number of Sites	16	54	24	47	50	175
			Value	3.743	4.22	3.84	5.83	3.65	4.44
			Benthic Health Category	Data deficient	Very Good	Very Good	Good	Fair	Good
			Benthic Health Score	5	5	5	4	3	4
		Variance of annual HBI scores	Value	0.2378621	0.470	0.325	0.509	0.355	0.607
		Significant Mann-Kendal time-series test to determine directional trend in HBI over time.	Time Period	2008-2014	2002-2014	2005-2013	2002-2014	2005-2014	2002-2014
			Trend	No trend	No trend	No trend	No trend	No trend	Negative

BENTHIC DATA SUFFICIENCY

Benthic Macro-Invertebrates	Data Sufficiency Indicator	Sub-Watershed					Watershed
		01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	01C - Prince Edward Island	01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	01E - Southeastern Atlantic Ocean, Nova Scotia	01F – Cape Breton Island	
	Total number of sub-sub-watersheds	21	5	18	17	9	70
	Year of earliest available monitoring	2008	2002	2005	2002	2005	2002
	Number of monitoring stations available for earliest monitoring	11	8	3	9	18	49
	Number of sub-sub-watersheds with earliest available monitoring stations	4	5	3	9	8	29
	Year of most recently available monitoring	2014	2014	2013	2014	2014	2014
	Number of monitoring stations available within last five years	17	52	12	40	75	196
	Number of sub-sub-watersheds within last five years	4	5	10	10	7	38
	Number of years of sampling in last 10 years	7	10	10	10	10	10
	Overall Data Sufficiency Category	Insufficient	Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient	Partially Sufficient
	Data Sufficiency Score	0	3	1	1	1	1

Benthic macro-invertebrates in the Maritime Coastal basin
(median HBI by site for 2002-2014)



Hilsenhoff Biotic Index

- < 4.25 ● 4.26 - 5.00 ● 5.01 - 5.75 ● 5.76 - 6.50 ● 6.51 - 10.00
Very Good Good Fair Poor Very Poor

Source:
CABIN (2014), Cape Breton Highlands National Park (2014),
Southeast Environmental Association (2014), BBEMA (2014)

FIGURE. ANALYSIS OF VARIANCE FOR HILSENHOFF'S BIOTIC INDEX VALUES FOR BENTHIC MACRO-INVERTEBRATE COMMUNITIES SAMPLED IN THE MARITIME COASTAL WATERSHED.

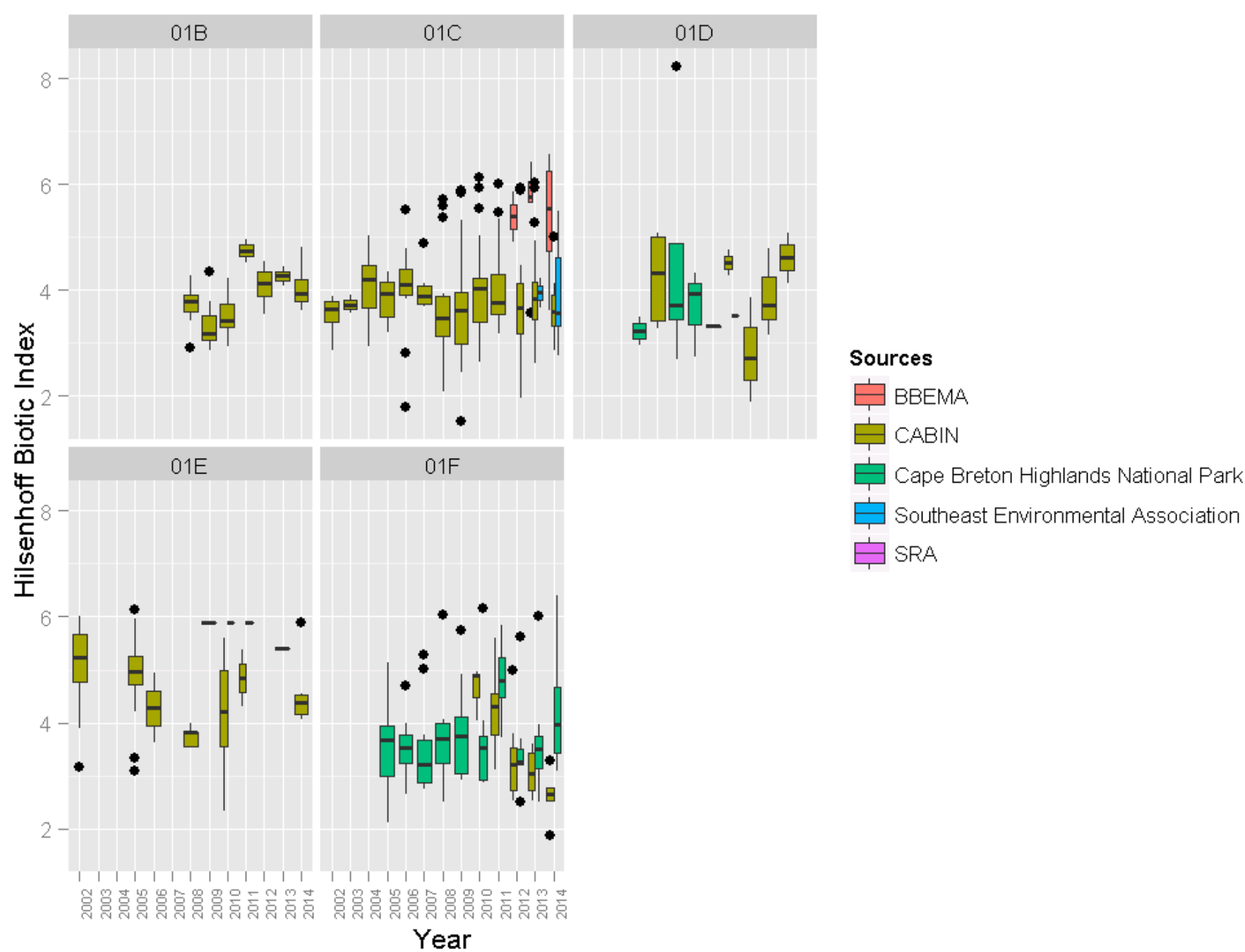


TABLE . HILSENHOFF'S BIOTIC INDEX VALUES FOR BENTHIC MACRO-INVERTEBRATE COMMUNITIES SAMPLED IN THE MARITIME COASTAL WATERSHED, BY YEAR, SUB-WATERSHED AND DATA SOURCE.

Sub-Watershed	Year	Data Source	Number of Sites	HBI Value	5-Years Weighted Average by sub-watershed
01B - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	2014	CABIN	12	3.94	3.87
	2013	CABIN	2	4.26	
	2012	CABIN	6	4.13	
	2011	CABIN	2	4.75	
	2010	CABIN	11	3.42	
	2009	CABIN	8	3.18	
	2008	CABIN	8	3.77	
01C – Prince Edward Island	2014	Bedeque Bay Environmental Management Association (BBEMA)	22	5.53	4.35
	2014	CABIN	22	3.58	
	2014	Southeast Environmental Association	22	3.56	
	2013	BBEMA	37	5.76	
	2013	CABIN	37	3.84	
	2013	Southeast Environmental Association	37	3.95	
	2012	BBEMA	25	5.38	
	2012	CABIN	25	3.66	
	2011	CABIN	20	3.76	
	2010	CABIN	21	4.04	
	2009	CABIN	17	3.63	
	2008	CABIN	19	3.48	
	2007	CABIN	7	3.89	
	2006	CABIN	11	4.10	
	2005	CABIN	7	3.94	
	2004	CABIN	7	4.21	
	2003	CABIN	4	3.72	
	2002	CABIN	7	3.63	
01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	2013	CABIN	2	4.61	3.70
	2012	CABIN	3	3.71	
	2011	CABIN	3	2.73	
	2010	CABIN	3	4.52	
	2010	Cape Breton Highlands National Park	3	3.51	
	2009	CABIN	2	3.32	
	2008	Cape Breton Highlands National Park	3	3.95	
	2007	Cape Breton Highlands National Park	4	3.73	
	2006	CABIN	9	4.32	
	2005	Cape Breton Highlands National Park	3	3.23	
01E - Southeastern Atlantic Ocean, Nova Scotia	2014	CABIN	6	4.38	5.02
	2013	CABIN	1	5.39	
	2011	CABIN	3	4.84	
	2011	SRA	3	5.90	
	2010	CABIN	24	4.21	
	2010	SRA	24	5.90	
	2009	SRA	1	5.90	
	2008	CABIN	5	3.82	
	2006	CABIN	2	4.28	
	2005	CABIN	22	4.97	
	2002	CABIN	10	5.23	
01F – Cape Breton Island	2014	CABIN	15	2.65	3.68
	2014	Cape Breton Highlands National Park	15	3.95	
	2013	CABIN	18	3.05	
	2013	Cape Breton Highlands National Park	18	3.51	
	2012	CABIN	17	3.21	
	2012	Cape Breton Highlands National Park	17	3.27	
	2011	CABIN	17	4.31	
	2011	Cape Breton Highlands National Park	17	4.79	
	2010	CABIN	11	4.88	
	2010	Cape Breton Highlands National Park	11	3.53	
	2009	Cape Breton Highlands National Park	12	3.73	
	2008	Cape Breton Highlands National Park	12	3.70	
	2007	Cape Breton Highlands National Park	11	3.21	
	2006	Cape Breton Highlands National Park	12	3.53	
	2005	Cape Breton Highlands National Park	18	3.68	

TABLE. RESULTS OF MANN-KENDALL NON-PARAMETRIC TREND ANALYSIS OF HILSENHOFF'S BIOTIC INDEX OVER TIME IN THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED.

Watershed	Data Source	Start Year	End Year	Number of sites	Theil-Sen Slope	Mann-Ken Score	Mann-Ken p-value
Entire Basin	All	2002	2014	189	-0.17	-48	0.0041 **
	BBEMA	2012	2014	6	0.08	1	1
	CABIN	2002	2014	138	-0.05	-28	0.0995
	Cape Breton Highlands National Park	2005	2014	40	0.02	5	0.7205
	SRA	2009	2011	1	0	0	NaN
01B - - Gulf of St. Lawrence and Northern Bay of Fundy, New Brunswick	All	2008	2014	16	0.13	7	0.37
01C – Prince Edward Island	All	2002	2014	54	-0.13	-32	0.06
01D - Bay of Fundy and Gulf of St. Lawrence, Nova Scotia	All	2005	2013	24	0.02	2	0.92
01E - Southeastern Atlantic Ocean, Nova Scotia	All	2002	2014	47	0.08	23	0.17
01F – Cape Breton Island	All	2005	2014	50	-0.07	-1	1

SUMMARY

TABLE. OVERALL SCORING RESULTS FRESHWATER THREATS ASSESSMENT OF MARITIME COASTAL WATERSHED, BY SUB-WATERSHED AND PEARSE WATERSHED

PEARSE BASIN	SUB WATERSHED SCORE			
	WSCSDA	SUB WATERSHED NAME	INDICATOR	FINAL - <i>MEDIAN</i>
Maritime Coastal	01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	THREAT CLASSIFICATION	Low
			SCORE	33.33
	01C	Prince Edward Island	THREAT CLASSIFICATION	High
			SCORE	66.67
	01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	THREAT CLASSIFICATION	High
			SCORE	63.33
	01E	Southeastern Atlantic Ocean (N.S.)	THREAT CLASSIFICATION	High
			SCORE	60
	01F	Cape Breton Island	THREAT CLASSIFICATION	Moderate
			SCORE	40
	OVERALL PEARSE BASIN SCORE			
			THREAT CLASSIFICATION	Moderate
			SCORE	49.28

TABLE. SCORING RESULTS FRESHWATER THREAT INDICATORS OF THE MARITIME COASTAL WATERSHED, BY SUB-WATERSHED AND PEARSE WATERSHED

PEARSE BASIN	SUB WATERSHED SCORE												
	WSCSDA	SUB WATERSHED NAME	INDICATOR	POLLUTION	CLIMATE CHANGE	ALTERATION OF WATER FLOWS	INVASIVE SPECIES	FRAGMENTATION	WATER USE	HABITAT LOSS	WATERSHED AREA (m2)	RELATIVE WATERSHED AREA	
Maritime Coastal	01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	THREAT CLASSIFICATION	High	Low	No threat reported	Very low	High	Low	Low	61,318,101,456	49.85%	
			SCORE	80	33.33	0	20	70	25	40			
	01C	Prince Edward Island	THREAT CLASSIFICATION	Very High	Moderate	No threat reported	Very low	High	Low	High	5,746,403,474	4.67%	
			SCORE	100	66.67	0	20	80	25	80			
	01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	THREAT CLASSIFICATION	Very High	Moderate	Low	Unknown	High	Low	Moderate	21,927,821,298	17.83%	
			SCORE	100	66.67	40	-9999	80	25	60			
	01E	Southeastern Atlantic Ocean (N.S.)	THREAT CLASSIFICATION	Very High	Moderate	Moderate	Low	High	Low	Moderate	23,666,758,922	19.24%	
			SCORE	100	66.67	60	40	80	25	60			
	01F	Cape Breton Island	THREAT CLASSIFICATION	Moderate	Moderate	Very low	Low	High	Low	Low	10,349,337,096	8.41%	
			SCORE	60	66.67	20	40	70	25	40			
	OVERALL PEARSE BASIN SCORE												
				THREAT CLASSIFICATION	Very High	Moderate	Low	Low	High	Low	Moderate		
				SCORE	86.66	50.05	20.36	21.97	74.17	25	49.28		

01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)
01C	Prince Edward Island
01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)
01E	Southeastern Atlantic Ocean (N.S.)
01F	Cape Breton Island

SUB-INDICATOR SCORES BY SUB-WATERSHED

POLLUTION

TABLE 16. SCORING RESULTS OF POLLUTION THREAT BY SUB-INDICATOR AND SUB-WATERSHED

		SUB-INDICATOR																		
		Point Source Pollution			Pipeline incidents			Transporation Incidents			Agricultural Contamination									
		SUB-SUB-INDICATOR																		
											Risk of Water Contamination by N			Risk of Water Contamination by Pesticides			Risk of Water Contamination by P			
		Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	
WSCSD A	SUB WATERSHED NAME	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	
01B		Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	20754.28	80	High	-9999	-9999	Unknown	18	40	Low	0.92	80	High	0.2	40	Low	0.46	60	Moderate
01C		Prince Edward Island	10059.37	80	High	0	0	None	0	0	None	4.84	100	Very High	2.47	100	Very High	2.16	100	Very High
01D		Bay of Fundy and Gulf of St. Lawrence (N.S.)	10112.7	80	High	3000	20	Very Low	4	20	Very Low	2.46	100	Very High	0.69	60	Moderate	1.76	100	Very High
01E		Southeastern Atlantic Ocean (N.S.)	17791.18	80	High	2.5E+08	100	Very High	14	40	Low	0.53	60	Moderate	0.08	20	Very Low	0.22	40	Low
01F		Cape Breton Island	4068.89	60	Moderate	0	0	None	2	20	Very Low	0.38	60	Moderate	0.14	40	Low	0.51	60	Moderate

CLIMATE CHANGE

TABLE 17. SCORING RESULTS OF CLIMATE CHANGE THREAT BY SUB-INDICATOR AND SUB-WATERSHED

		SUB-INDICATOR											
		Spring Precipitation Anomaly			Summer Maximum Temperature Anomaly			Summer Precipiation Anamoly			Winter Mean Temperature Anamoly		
WSCSDA	SUB WATERSHED NAME	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification	Value	Score	Threat Classification
01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	0.01	33.33	Low	0.05	33.33	Low	0.1	33.33	Low	0.2	33.33	Low
01C	Prince Edward Island	-0.15	66.67	Moderate	0.51	33.33	Low	0.28	66.67	Moderate	0.09	33.33	Low
01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	-0.13	66.67	Moderate	0.78	33.33	Low	0.2	33.33	Low	0.13	33.33	Low
01E	Southeastern Atlantic Ocean (N.S.)	-0.14	66.67	Moderate	0.97	33.33	Low	0.14	33.33	Low	0.07	33.33	Low
01F	Cape Breton Island	-0.19	66.67	Moderate	0.58	33.33	Low	0.3	66.67	Moderate	0.02	33.33	Low

ALTERATION OF WATER FLOWS

TABLE 18. SCORING RESULTS OF ALTERATION OF WATER FLOWS THREAT BY SUB-INDICATOR AND SUB-WATERSHED

		SUB-INDICATOR		
		Area of Reservoirs/Dams		
WSCSDA	SUB WATERSHED NAME	Value	Score	Threat Classification
01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	0	0	None
01C	Prince Edward Island	0	0	None
01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	35.7	40	Low
01E	Southeastern Atlantic Ocean (N.S.)	132.3	60	Moderate
01F	Cape Breton Island	9.6	20	Very Low

INVASIVE SPECIES

TABLE 19. SCORING RESULTS OF INVASIVE SPECIES THREAT BY SUB-INDICATOR AND SUB-WATERSHED

		SUB-INDICATOR		
		Presence of Invasive Species		
WSCSDA	SUB WATERSHED NAME	Value	Score	Threat Classification
01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	4	20	Very Low
01C	Prince Edward Island	3	20	Very Low
01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	-9999	-9999	Unknown
01E	Southeastern Atlantic Ocean (N.S.)	10	40	Low
01F	Cape Breton Island	8	40	Low

WATER USE

TABLE 20. SCORING RESULTS OF WATER USE THREAT BY SUB-INDICATOR AND SUB-WATERSHED

		SUB-INDICATOR		
		Water Use		
WSCSDA	SUB WATERSHED NAME	Value	Score	Threat Classification
01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	N/A	25	Low
01C	Prince Edward Island	N/A	25	Low
01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	N/A	25	Low
01E	Southeastern Atlantic Ocean (N.S.)	N/A	25	Low
01F	Cape Breton Island	N/A	25	Low

FRAGMENTATION

TABLE 21. SCORING RESULTS OF FRAGMENTATION THREAT BY SUB-INDICATOR AND SUB-WATERSHED

		SUB-INDICATOR					
		Fragmentation by dams			Fragmentation by roads and rail		
WSCSDA	SUB WATERSHED NAME	Value	Score	Threat Classification	Value	Score	Threat Classification
01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	0.47	40	Low	0.01	100	Very High
01C	Prince Edward Island	0.83	60	Moderate	0.04	100	Very High
01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	0.64	60	Moderate	0.03	100	Very High
01E	Southeastern Atlantic Ocean (N.S.)	0.72	60	Moderate	0.01	100	Very High
01F	Cape Breton Island	0.43	40	Low	0.02	100	Very High

HABITAT LOSS

TABLE 22. SCORING RESULTS OF HABITAT LOSS THREAT BY SUB-INDICATOR AND SUB-WATERSHED

		SUB-INDICATOR					
		Land use/Land cover			Forest loss		
WSCSDA	SUB WATERSHED NAME	Value	Score	Threat Classification	Value	Score	Threat Classification
01B	Gulf of St. Lawrence and Northern Bay of Fundy (N.B.)	4.94	40	Low	2.9	40	Low
01C	Prince Edward Island	51.94	80	High	7.92	60	Moderate
01D	Bay of Fundy and Gulf of St. Lawrence (N.S.)	14.1	60	Moderate	6.28	60	Moderate
01E	Southeastern Atlantic Ocean (N.S.)	2.97	40	Low	4.74	60	Moderate
01F	Cape Breton Island	4.42	40	Low	1.93	40	Low