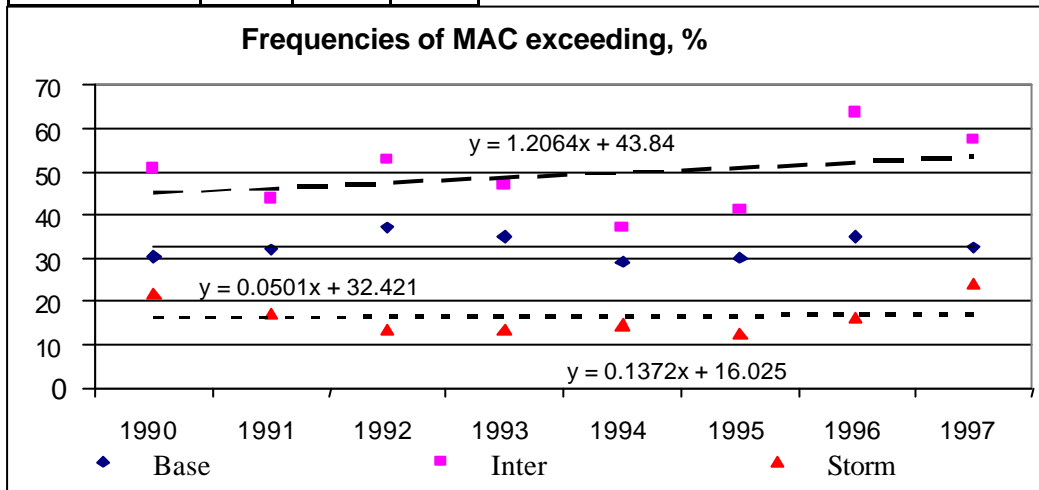


My replica in addition to the Regulation 339 revoke (Spring 2006)

In 2002, I assessed Chlorides in flow components of Etobicoke Creek using my own method titled the Separated Flow Approach based on available at Environment Canada monitoring data.

The results expressed in frequencies of MAC exceeding are given in the table and chart below.

Years	% of MAC (250 mg/L) exceeding			
	Base-flow	Inter-flow	Storm flow	Total flow
1990	30.4	51.0	21.6	34.2
1991	32.1	43.7	17.2	32.1
1992	36.9	52.9	13.5	40.7
1993	34.8	47.1	13.2	36.4
1994	29.3	37.0	14.6	31.8
1995	30.1	41.3	12.5	34.2
1996	35.0	63.7	16.3	42.9
1997	32.6	57.6	24.2	37.5



The interflow and storm flow components are not permanent and their frequencies of MAC exceeding is just a percentage of all cases occurred. The total and baseflow are permanent. Their frequencies are the % of 365 days a year. It means that the Chloride concentrations in total flow exceed MAC from 116 to 157 days a year.

It is not difficult to see that the trends of the MAC exceeding are positive in all flow components: baseflow, interflow and storm flow. Amount of salt in groundwater and rivers is growing. Year average loading of chlorides from Etobicoke Creek is over 26 000 tonnes, ranging from 19 000 to 43 000 t/year (drainage area 204 sq. km).

The Fletcher's Creek project conducted at Sheridan College last year in frame of the Environmental Control Program gave much worse result: the concentration of TDS in the total flow exceeded 0.5 g/L (the TDS limit for fresh waters according to WMO) 90% of days (duration of the project was 140 days from March 14 till July 31), in the baseflow – 96%, in inter – 74%, and in storm flow – 33%. TDS are not only chlorides, but 60-90% of them are. Loading of TDS for the period was 2021 tonnes (drainage area 15.5 sq. km).