

Daily Chloride contamination of Lake Ontario by Etobicoke Creek

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Abstract

On the heavy urbanized Etobicoke Creek watershed salt crystals and other chlorides are used for roads deicing in winter and for suppressing dust in summer. How are the chlorides from these two sources distributed between surface and ground waters; how subsequently ends up in Lake Ontario, which tributary Etobicoke Creek is? Can surface water monitoring results be interpreted this way? Is it possible to assess daily dynamics of surface and groundwater chlorides based on the available monitoring database? An attempt to quantitatively estimate daily contamination of direct, inter- and baseflow of a highly urbanized watershed (209 km²) was done using the only source of quality data – the monitoring database of Environment Canada (~1 sample/month). The result has revealed the predominant contamination of the [interflow pathway for Etobicoke Creek](#).

Daily loads of Chlorides into Lake Ontario (Etobicoke Cr. - 1990)

