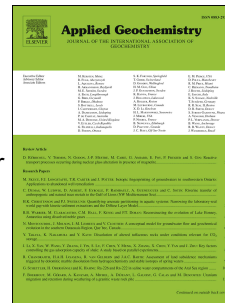


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Soil as a reservoir for road salt retention leading to its gradual release to groundwater

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1 **TITLE:** Soil as a reservoir for road salt retention leading to its gradual release to groundwater

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8 **KEYWORDS:** soil geochemistry, urban soils, contaminant transport, road salt, chloride

9 **HIGHLIGHTS:**

- 10 • Soils can retain Na and Cl for at least 2.5-5 months after road salt application.
- 11 • Capacity for non-conservative Cl retention can be exhausted by high Cl application.
- 12 • Cation exchange enhances Na retention and Ca, Mg, and K release from salted soils.
- 13 • Cl retention capacity is highest in sandy soils with high organic matter content.

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