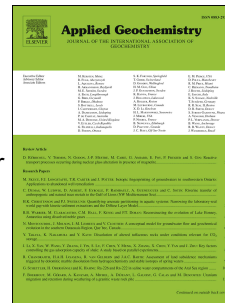


Accepted Manuscript



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

Heather K. Robinson, Elizabeth A. Hasenmueller, Lisa G. Chambers

PII: S0883-2927(17)30065-3

DOI: [10.1016/j.apgeochem.2017.01.018](https://doi.org/10.1016/j.apgeochem.2017.01.018)

Reference: AG 3810

To appear in: *Applied Geochemistry*

Received Date: 1 June 2016

Revised Date: 10 January 2017

Accepted Date: 20 January 2017

Please cite this article as: Robinson, H.K., Hasenmueller, E.A., Chambers, L.G., Soil as a reservoir for road salt retention leading to its gradual release to groundwater, *Applied Geochemistry* (2017), doi: 10.1016/j.apgeochem.2017.01.018.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

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

2 **AUTHORS:** Heather K. Robinson^{a,*}, Elizabeth A. Hasenmueller^a, and Lisa G. Chambers^b

3 ^a Saint Louis University Department of Earth and Atmospheric Sciences, 205 O'Neil Hall, 3642

4 Lindell Blvd, St Louis, MO 63108, United States

5 ^b University of Central Florida Department of Biology, Biological Sciences Bldg., 4110 Libra

6 Drive, Orlando, FL 32816, United States

7 * Corresponding author: robinsonhk@slu.edu

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.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات