

## ***Interactive comment on “Terrestrial liming to promote Atlantic Salmon recovery in Nova Scotia – approaches needed and knowledge gained after a trial application” by S. M. Sterling et al.***

**Anonymous Referee #1**

Received and published: 12 September 2014

General Comments: This is a well written paper and concerns a topic that is highly relevant globally and particularly in Nova Scotia which is an area of long term acidic deposition. The concept of terrestrial liming is one that is not explored that often and which is a highly intensive ecosystem scale project. The work is well stated and the data is thoroughly examined and there are justified conclusions. I recommend publication minor revisions for consideration below. It is a good contribution to the literature on potential mitigation methods for acidification and the impacts of acidification on organisms.

Specific Comments:

C3781

I might suggest would be some in-depth discussion of the role of DOM in the aluminum cycle and implications of pH shifts.

Page 10125: I think QA/QC data needs to be included for the TOC and the ICP-MS analyses. Recoveries of reference materials and reproducibility.

Were the TOC measurements were completed by purging IC first then measuring TOC, or as the difference between TC and TIC? Presumably there would be a lot of IC in the samples so this would affect the QA/QC results.

A lot of the results interpretation rests on the accuracy of the pH probes. I think the authors have done a good job of addressing this, however I think a little more discussion of others experiences with long term probe deployment and fouling error might be warranted.

---

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 10117, 2014.

C3782