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Pb and Fe flow through the mire-lake complex of Skogaryd catchment - a system under anthropogenic influence

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Editor decision: Publish subject to minor revisions (review by editor)

Editor comments:

The authors have satisfactorily addressed most of the 3 reviewer comments, although there is some variability in the completeness of responses. The Response to Reviewer 1 includes the revised text and its location, but this was not necessarily the case for the responses to Reviewers 2 and 3. Please see below where further clarification is desirable – the list may not be complete. There were additional minor errors introduced or retained in the revised version.

Response to reviewer 1.

Question 1.3: The revised text addresses the reviewer comment, but the response to reviewer text is slightly different than the actual revised text.

Question 1.4: The authors address the query, but is the answer also explained in the text? If so, please indicate where to find it.

Response to Reviewer 2:

Question 2.1: The answer provided in the Response is well-written and clearer than the revised text in section 4.2. Which part of the revised text specifically addresses this question? Please also clarify what is meant by the term “hydrological connectivity”, since it is a key explanatory factor in this manuscript but is not defined.

Question 2.3: The answer provided in the Response here is also clear. Please specify the corresponding lines/text in the manuscript that provide this answer.

Question 2.4. Please specify text and lines in the manuscript where it is discussed.

Question 3.4. This comment belongs in the reviewer 3 response.

Response to reviewer 3

Question 3.2. “These known drivers... also discussed in the manuscript”. – Where?

Question 3.3. It is not too important, but I see that the methods still includes Hg, As, Cd, although it was said to be omitted.

Question 3.4. “will clarify this better in the text”. Where?

Question 3.8. Please specify where the new text can be found, especially the “Pb concentrations for water streams will be better explained... in the next version of the manuscript...”

OTHER

Other minor edits to consider (Line numbers refer to manuscript v2):

Line 50: “in different forms” instead of “on different forms”

Line 53 : “changes ...are” instead of “changes... is”

Line 59: “Sphagnum-derived”

Line 80 “Fe’s ability to redox cycle” – is this the ability to cycle between different redox states?

Line 107: “seem” instead of “seems”

Line 117 “such as Fe” instead of “as Fe”?

Line 117: “redox conditions that occur” instead of “redox conditions as occur”?

Line 119: “are commonly” instead of “is commonly”

Line 138: “surmount to ” should be either “amount to or exceed” ?

Line 160: “intermediate” can be in quotes here.

Line 443: “likely representative for the rest of Sweden” is probably not what you mean here.

Line 447: Despite

Line 448: “2018” instead of “of2018”

Line 458 “Notably” instead of “noteably”