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Interactive comment on “The past, present, and future of soils and human health studies” by E. C. Brevik and T. J. Sauer

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Received and published: 4 June 2014

P53 L25 – the sentence that begins with “These recognitions. . .” is awkward as written—consider rephrasing

The sentence has been rephrased.

P58 L12 – change remained to remains

Because we are still talking history at this point in the manuscript (defined by us in this paper as work done before 2000, whereas ~2000 to the present is “current” work), we feel that “remained” is the more appropriate wording.

P60 – first paragraph – this is really interesting and has substantial implications for

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modifying the way we typically consider nutrient budgets. There has been interesting working by Driscoll and others along these lines for example focused on N budgets/cycling in the Chesapeake Bay system that would be good to include here. Would also be nice to include a statement or two about how this highlights human-soil interactions and the idea of the Anthropocene and human induced global soil change – see the recent paper by Bacon et al in SSSAJ.

A couple of sentences have been added to this paragraph to incorporate the suggestion.

P60 L25 – I am biased by my location in an arid environment – but one the largest human health risk factors in the US Southwest and arid parts of California is dust exposure – but via increased risk of asthma as well as exposure microbial agents such as Valley Fever, a soil borne pathogen. Given that that >30% of the earth's surface is arid to semiarid systems the role of dust deserves a bit more discussion.

The dust discussion has been slightly expanded and a few additional references have been brought in.

P62 L10 – it would be good to include a reference to work by J. Tabor and others focused on the soil ecology of the Valley Fever pathogen that thrives only in specific sets of soil properties –

A reference to the work of Tabor et al. has been added.

P62 L27 – I think the word likely can be deleted from this sentence – it is well accepted now in the latest IPCC report that changes in atm. CO₂ are definitively driving climate change.

“Likely” has been removed.

P64 – in the conclusion section – consider strengthening this with bullet points of key research foci that need to be addressed – eg setting this up so it could be used as a call to funding agencies highlighting in brief high impact statements why this area of

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research should be funded and/or the need to include soil scientists on panels involved with human-environment-health interactions.

The conclusion has been revised to include a bullet point listing of key research areas.

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