

Interactive comment on “Investigating the environmental response to water harvesting structures: A field study in Tanzania” by Jessica A. Eisma and Venkatesh M. Merwade

Anonymous Referee #3

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1. An important area of research - I don't think the impact of sand dams on invertebrates has been studied before and there is much that we don't know about such a popular technology in general. The authors are right to ask questions and I would like to see more, more rigorous research.
2. My main feedback relates to the main claim that sand dams are detrimental to macro invertebrates. In order to make this assertion I would have expected to see some sort of comparative study between river beds that are suitable for sand dams but where sand dams have not been built, vs river beds with sand dams.
3. I would not expect to see a great deal of macro invertebrates in a semi arid dry

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riverbed, if sand dam levels are not 'normal', what level are they comparing it to?

3. The authors claim a lack of quantitative research skews perceptions towards a rosier picture of sand dams than is true, but their study has a small sample size, over only one season (although intensively studied). There were probably practical limitations - research is expensive, but this could be acknowledged.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-147>, 2019.