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Interactive comment on "Nature-Based Solutions for hydro-meteorological risk reduction: A state-of-the-art review of the research area" by Laddaporn Ruangpan et al.

Anonymous Referee #1

Received and published: 22 June 2019

Dear editor, dear authors,

The premise of this article is extremely interesting and some of the conclusions of the article, in particular the "Overview of knowledge gaps / potential future research" is a very useful contribution to advancing this topic. The article helps to give an overview of the many concepts and terms associated with Nature based solutions for disaster risk reduction and it attempts to provide a mixed quantitative /qualitative assessment of a number of pre-determined questions that the authors have outlined as the objectives of the review.

It therefore merits to be published if some fundamental methodological issues can be

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resolved.

1. Concepts The article provides an interesting historical overview of the different related concepts but there is still a confusion of terms. The abstract in particular is confusing, i.e. Nature based Solutions (NbS) is generally considered to be an umbrella term under which other types of approaches, Eba, Eco-DRR and GI / GBI provide more specific solutions to more specific issues (see various definitions given by IUCN and EU-related). This does not come out clearly in the article.

For example: p. 4/ line 30 NbS is not just about storm water

- 2. Methodology of the review This is where this reviewer has the greatest number of questions: - Good that multiple data bases were used but why assume that just because Scopus has the greatest number of articles, that it is the most comprehensive? You could have merged all three searches and then removed duplicates. - Adding missing articles adds a huge bias to your search. Which articles were selected and based on what criteria? That the keywords were there? - Which criteria were used for deleted certain articles - perhaps I missed this? - Search terms: you had several search terms from your first column with "urban", this may have included a bias toward urban - One of the main objectives of this review was to find trends and patterns, so only section 4.1 Trends, knowledge gaps and future research prospects provides quantitative results, the remaining sections onward are mainly qualitative descriptions to answer your pre-defined research questions: e.g. (2) Effectiveness of multiple NBS sites, etc. It should be clarified that you the review is quantitative but also qualitative based on pre-defined questions. - However you do not justify why you selected these topics - again, they did not emerge as trends in the literature, you selected them and then found literature to analyse them . In other words, you combine deductive with inductive research. This should be made more explicit, or you should chose one or the other.
- 3. Other Some paragraphs appeared to be more a promotion of author's projects

rather than related to the literature review ?? They might belong in the conclusions but not as part of the analysis.. -The manuscript needs to be redrafted by a native English speaker. e.g. p8, line 27 "desiderative" ;) - The table on websites related to the topic is good but excludes a few important sites, namely IUCN's data base on EbA projects and the Partnership for Environment and Disaster Risk Reduction (PEDRR) website

This reviewer hopes the above comments can be taken into consideration as this work deserves to be published.

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