

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC2
<https://doi.org/10.5194/nhess-2022-104-RC2>, 2022
© Author(s) 2022. This work is distributed under
the Creative Commons Attribution 4.0 License.

Comment on nhess-2022-104

Anonymous Referee #2

Referee comment on "Invited perspectives: Managed realignment as a solution to mitigate coastal flood risks – optimizing success through knowledge co-production" by Mark Schuerch et al., Nat. Hazards Earth Syst. Sci. Discuss.,
<https://doi.org/10.5194/nhess-2022-104-RC2>, 2022

Referee report

You ask a number of questions under your review criteria. I will deal with them in numbered order below.

1 Does the paper address relevant scientific and/or technical questions within the scope of NHESS?

Response: Yes. The paper clearly complies with the criteria set out in your journal's "Aims and scope" explanation.

2 Does the paper present new data and/or novel concepts, ideas, tools, methods or results?

Response: Yes. The paper presents an effective review of managed realignment (Sections 2 to 4). Introduced by Section 5, Section 6 (244-298) sets out a stakeholder

approach to managed realignment; this approach is to be commended though, as set out below (Question 18), is in need of attention.

3 Are these up to international standards?

Response: No.

a) The opening explanatory sentence ("Scenario building... change mitigation", 249-250) reads like the beginning of a review of the literature. It would help if there were a brief explanation (perhaps a couple of sentences) that would link the introductory remarks given in Section 5 to the model's presentation in Section 6 by outlining the sources beyond Tompkins (2008) that inform the approach on which the model is based, with reference to a few of the key sources.

b) The justification given for the approach is currently in Section 6. This is that "In reality, scientific enquiry is... subjective" (254-255). While this is entirely plausible and follows from the discussion in 209-216, it needs greater justification than a half sentence. Some brief reference here might be given to post-positivist theory and its explanation of scientific knowledge as situated, in particular reference might be made to a source such as Foucault (1970). This sentence seems to be better suited to the discussion on participative processes in Section 5 (maybe around 216?).

Foucault, M (1970) The order of things (Tavistock)

4 Are the scientific methods and assumptions valid and outlined clearly?

Response: No.

a) The explanation of science and engagement (42-62) is confused and currently switches from issue to issue and then back. This section could be rewritten giving: first the scientific problems, second the engagement problems.

b) The stakeholder model (244-298) is in need of clearer and fuller explanation. Part of that might be a rewriting of 245-262, so that first would come the statement of intent (currently 253-254), then general principles (currently 259-262), and then historical approaches and the reasons for changing them. In addition, there should also be a fuller explanation of the principles and evidence behind the stakeholder model (see Question 7).

5 Are the results sufficient to support the interpretations and the conclusions?

Response: Yes. However, the reasons for implementing the stakeholder model (244-298) are in need of a fuller explanation that demonstrates more clearly than the present version how they follow from Section 5. This would be of particular help in that Section 6 delivers the key thinking (the stakeholder model) of the paper.

6 Does the author reach substantial conclusions?

Response: Yes. The conclusions (Section 6) are genuinely interesting, though in need of a fuller justification and explanation.

7 Is the description of the data used, the methods used, the experiments and calculations made, and the results obtained sufficiently complete and accurate to allow their reproduction by fellow scientists (traceability of results)?

Response: No. Sections 1-5 are complete and accurate. Section 6, however, is in need of fuller explanation. In particular, the prescription for the model (264-296) is sketchy and the reasons why political practice makes these "shoulds" necessary ought to be explained. This means linking back (very briefly) to the political preferences explained in Section 5, and where necessary (very briefly) explaining the evidence base for observations (such as those at 269-272, 283-285, 291-294).

8 Does the title clearly and unambiguously reflect the contents of the paper?

Response: No. The focus of the paper is on managed realignment (as acknowledged in 25-29). Perhaps the paper could more accurately be titled "Managed realignment as a solution to mitigate coastal flood risks – Optimizing success through knowledge co-production".

9 Does the abstract provide a concise, complete and unambiguous summary of the work done and the results obtained?

Response: Nearly so. For the reasons explained above in answer to Question 8, the first sentence (7) seems redundant.

10 Are the title and the abstract pertinent, and easy to understand to a wide and diversified audience?

Response: Yes.

11 Are mathematical formulae, symbols, abbreviations and units correctly defined and used? If the formulae, symbols or abbreviations are numerous, are there tables or appendixes listing them?

Response: Almost. "m2" is used for m^2 in 153.

12 Is the size, quality and readability of each figure adequate to the type and quantity of data presented?

Response: Yes.

13 Does the author give proper credit to previous and/or related work, and does he/she indicate clearly his/her own contribution?

Response: Nearly so. As explained in the answer to Question 4, a clearer explanation of why the model has been designed in the way it has would be desirable.

14 Are the number and quality of the references appropriate?

Response: Mostly. Shiers (2014) (182) is a tendentious blog and does not look entirely trustworthy. There is already a refereed, documented example of the same issue in Oliver (2021, 91-92) which is more reliable.

Oliver, S (2021) Land abandoned to the sea: the managed realignment of coastal areas (IB Tauris)

15 Are the references accessible by fellow scientists?

Response: Yes.

16 Is the overall presentation well structured, clear and easy to understand by a wide and general audience?

Response: Mostly. The suggestion has already been made that 245-262 could be rewritten; the same could also be said of 42-62. In both cases it would help if the authors were to: make their overall point, then proceed from general issues to specific points.

17 Is the length of the paper adequate, too long or too short?

Response: Too short. Section 6 needs expanding in order to address the comments made above, perhaps to half as long again as its current length.

18 Is there any part of the paper (title, abstract, main text, formulae, symbols, figures and their captions, tables, list of references, appendixes) that needs to be clarified, reduced, added, combined, or eliminated?

Response: Yes. 42-62 (rewritten) and Section 6 (expanded).

19 Is the technical language precise and understandable by fellow scientists?

Response: Yes.

20 Is the English language of good quality, fluent, simple and easy to read and understand by a wide and diversified audience?

Response: Mostly. There are a few errors: "Avgerage" and "Scheme_Typ" (diagram, following 36), "ca. 3000" (128), "modelling on" (132), "m2" (153, four times), single inverted commas (170), "to considerably vary" (169), "6" (299).

21 Is the amount and quality of supplementary material (if any) appropriate?

Response: Not applicable.

Ends.