

***Interactive comment on “Before the fire:
Assessing post-wildfire flooding and debris-flow
hazards for pre-disaster mitigation” by
Ann M. Youberg et al.***

Anonymous Referee #1

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This manuscript does not conform to the stated format of the journal, which asks for "...original research on natural hazards and their consequences." While the writing and figure production is of high quality, this is not an original piece of research and unfortunately is not fit for publication in a scientific journal (it would be a perfectly acceptable project/technical report). This is a project summary (line 11-12 on page 2), and the figures are not original, see references to the original works in each of the reference captions.

There are no hypotheses. They do have several goals for the study, but these goals are not generalized beyond the specific county in Arizona in which the work was conducted.

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Therefore, it is left to the readers to determine if the work could be used elsewhere.

The authors conducted modeling, but they merely state that modeling was conducted (section 3.2 - 3.3). They do not discuss model details, equations, parameter used in the models, or even input data to the models (e.g. no details on actual rainfall rates used). Again, as openly stated by the authors, this is a summary of a study that was done, it is not an actual scientific research publication with original research.

The discussion merely restates the methods, but does not offer any analysis that would suggest generalization. They made maps to define non-regulatory risk-zone maps. How do we know that these are actual risk zones? For example, they state "... the flood flow zones are probably fairly well constrained." but there is no evidence to persuade readers that their zones are correct. Moreover, the models do not provide compelling evidence to persuade readers that either Laharz or Flo2D are applicable for debris flow runoff. There are no tests of the models that show they are correct in the county of interest.

Consequently, I do not think this manuscript is suitable for publication. If the authors were to: create original text (not just a summary) with testable hypotheses, generalizable results, model details, and a logical justification for their models, I think it may then be suitable for publication.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-74>, 2019.

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