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Comment on nhess-2021-217

Anonymous Referee #1

Referee comment on "Invited perspectives: When research meets practice: challenges, opportunities, and suggestions from the implementation of the Floods Directive in the largest Italian river basin" by Tommaso Simonelli et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2021-217-RC1>, 2021

A review of the Invited Perspective:

When research meets practice: challenges, opportunities and suggestions from the implementation of the Floods Directive in the largest Italian river basin , by Tommaso Simonelli, Laura Zoppi, Daniela Molinari and Francesco Ballio

The perspective focuses on an apparently successful example of an initiative leading to progress in natural disaster reduction and in the conditions for subsequent research on the topic. It includes an initial impetus, the subsequent procedure and the outcomes, specifically with respect to flooding related damage. The formal requirement of a revision of flood risk maps and flood risk management plans in the Po river region (Italy) led to the setup of a joint initiative of administrative bodies and research institutions on the assessment of procedure flood damage. This is an important step, as the calibration of tools for damage estimation is a problem far from being solved, both because of the lack of suitable data and because of uncertainty about the damage imposed on different economic and societal domains. These domains reach from damage to residential buildings to effects on transport chains and to intangible impacts like the loss of lives. The project set up led to an improved understanding of necessities and thus led to a basis for future research activities, which are suggested to be organized on a larger scale (e.g., European) level.

The approach is very relevant, and the perspective is rather clear. There are, however, a number of comments I have which should be addressed by the authors before acceptance of the manuscript.

- Details of the MOVIDA project are not clear. In order to make it a proper example, it would be relevant to understand

- Which institution started the initiative of responding to the requirement of the flood map revision by a project involving all the partners from administrative bodies and research, rather than trying to solve it internally?
 - Was the required funding for MOVIDA just consisting of in-kind contributions, or was it provided by submitting a (research-?) proposal to some funding agency?
 - Is information on the project details available? Please give references.
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- (line 26) The website <http://www.fdm.polimi.it/> has no relevant content.
 - (line 35 ff) I would also assume that interruptions of electric power and pollution effects (for example, oil spill) should be counted under indirect effects, even if just augmenting other damage. This was observed as a consequence of other flooding events. Have they been relevant in the Po river region?
 - (line 40-43) Unavailability of data can also have legal reasons. Is this something you came across? The other issue is probably that there are commercial reasons for withholding the data. I think this could be named, rather than just assigning the word "private" for explaining lacking availability.
 - (line 46) I do not understand what you mean with "complimentary" and existing duplications here.
 - (line 49-53) Damage assessment is a precondition for calibration of a damage model (for example, addressing the relation to flood levels). Was the goal just the assessment, or also the calibration and modelling? The latter two are needed for decision making.
 - (line 56) Was it really just the research institutions committing to work together, and not also the administrative institutions? This would actually surprise me.
 - (line 89-90) With respect to sustainability, I wonder why you suggest to go for a COST or EU funded project. In the end, it must be administrative bodies of different regions and countries which organize their cooperation. To my knowledge, this is actually a requirement of the European Water Directive, which addresses river basins.