

***Interactive comment on “Low-hanging fruits in large-scale fluvial landscaping measures: trade-offs between flood hazard, costs, stakeholders and biodiversity” by Menno W. Straatsma et al.***

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First of all, we would like to thank the anonymous referee (R1) for taking the time to review our paper and his/her opinion that there is interesting experience in this field case. A number of points raised will undoubtedly result in a clearer final paper. We disagree with the conclusion that there is no conclusive message to be learnt, and that only the application in a follow up would be interesting.

Conclusive message: We studied the literature carefully on this topic and did not find

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such a comprehensive overview for flood mitigation options, nor did R1 provide such references. Therefore, we would like to ask R1 to point out these papers if they exist. We showed the trade-offs between four relevant aspects of flood mitigation from hydrodynamics, ecology, costs and stakeholder involvement. This is comparing apples with oranges, but the metrics were produced in a quantitative manner using a standardized procedure, contrary to standard procedure where relative scores are determined in a lengthy decision making process. R1 labeled the fact that we found the trade-offs not unsurprising and stated that our results are ‘similar to those of a traditional analysis’ (P19 in his/her annotated manuscript). We argue that (1) the specific interventions that are found to be the optimum combination on two of these aspects is new information, and (2) the position and steepness of these optimum lines were unknown so far. For example, the cost-biodiversity optimum line is, surprisingly, nearly horizontal and the effectiveness per number of stakeholders was unknown so far. We believe this is an interesting message for a wider audience.

Follow up: We stated that our methodology suits the early stages of the planning process. R1 wants the follow up of this narrative, which we also aim at. However, this was outside the scope of this study, in which we developed, applied, and described the tools and the results. The application in co-creation and multi-stakeholder platforms would require a sociological methodology. We believe this paper would be an important step to back up such studies.

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