

Interactive comment on “Infiltration well to reduce the impact of land use changes on flood peaks: a case study of Way Kuala Garuntang catchment, Bandar Lampung, Indonesia” by D. I. Kusumastuti et al.

Anonymous Referee #2

Received and published: 20 June 2014

I read this paper with interest, because of the mention of infiltration wells to reduce flood peaks. This approach is similar to the introduction of so-called green infrastructure in cities being trialed in different parts of the world.

However, unfortunately, the paper came across more as a consulting engineer's report than a journal article that is aimed to be published in a top hydrology science journal. Even though the paper talks about the effect on floods, there is no test of the predictions through observations – this is just a design study, and I also understand that such a

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prediction cannot be tested due to lack of appropriate data. Therefore, this paper may be more suitable for an engineering hydrology journal, such as the Journal of Hydrologic Engineering.

While I can understand the case study aspect of this paper, for publication in HESS, the authors should try and frame it as a broader study, with the case study in Indonesia a particular case study. More effort should be spent towards the development of general conclusions that can be extrapolated to other places.

One possibility to overcome this limitation is to present the work as the effects of within-storm rainfall distribution, and how this impacts on the flood peak, with and without the presence of infiltration wells (not just the effects of infiltration wells on flood peaks – therefore a slight twist to the framing of the problem). This could be interesting, and the results could be extrapolated to other places. This is the only thing I can think of to turn the paper around, but it will require considerable re-working of the paper, and of course rewriting the paper.

A practical concern for me is that the presence of these infiltration wells could very well be a safety hazard for people and animals, especially the density that the authors are talking about. Are the authors, and the Indonesian authorities serious about the construction of these wells?

Finally, once it is revised for technical content, the paper must go through a language editor: there are far too numerous language errors that I could not be bothered to list them in my review.

I hope these comments are useful to the authors towards their revision.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 5487, 2014.

HESSD

11, C1940–C1941, 2014

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