

Interactive comment on ““Are we talking just a bit of water out of bank? Or is it Armageddon?” Front line perspectives on transitioning to probabilistic fluvial flood forecasts in England” by Louise Arnal et al.

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This paper provides a detailed overview of the role of FWDOs and MFDOs within the EA which as far as I'm aware isn't currently available within the academic literature. It also provides a timely discussion on the practical perspectives of transitioning to probabilistic fluvial forecasts within the EA supported by rich interview evidence. The combination of these two aspects provides a valuable contribution to the field in a well presented paper.

C1

On reading the paper there are a couple of areas that I think could be clearer, particularly around the definitions of lead times and decision makers.

1. Firstly the importance of timings/lead time is confusing as the focus changes throughout the paper from the 2-6 hour window for issuing flood warnings to the 2-5 day window for more strategic planning decision making. The relative value, and expected use of probabilistic forecasts will be different at these two timescales. The quote on line 270 is key to this discussion. It would be helpful to have a clearer focus on what lead time is being discussed at different points in the paper. A specific example is line 234 talking about waiting for the forecast to be confident – I expect there is also a balance of confidence and lead time here
2. Largely the paper considers the FWDOs as the decision makers as they are the ones issuing flood warnings. The latter part of the paper also introduced external stakeholders as decision makers, making decisions on the EA flood warnings. It would improve clarity to make it clearer when you are talking about internal and external decision makings. In particular this applies to the discussion around lines 500 and 540. Maybe also consider adding a definition of 'decision maker' to the glossary and recognising that decisions are made at various points during the forecasting chain.
3. Similarly it is not clear who makes the decisions re increasing control room staffing or increasing field resources (e.g. for putting up flood defences). Is this the FWDO, the MFDO or someone else? And what time scale are these decisions made on/how will the change to probabilistic forecasts affect them?
4. I know it is beyond the scope of the paper but there is limited consideration of how the change to probabilistic forecasts might affect external decision makers although it is raised as a concern by FWDOs. A useful extension to the work would be to see what information those receiving flood warnings actually want, to understand if it is a perceived or real concern about the lack of binary forecast information and the pushing of decision making further down the chain. This is also relevant to recommendation 1

C2

– as well as communicating that there will be a change, should the EA also have some responsibility for preparing external decision makers on how this might change their practices?

The following are some minor text edits:

Line 19 – I would remove 'alternative', I'm not sure why these two areas are alternative.

Lines 130:134 – this is largely a repeat of lines 76:81.

Line 224 – increase/ change of 200%?

Personally figure 5 (the wordcloud) doesn't add much to the paper for me.

Given the quotes listed in the appendix, I think the wording of table 1 could be stronger.

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