

## ***Interactive comment on “The European flood risk directive: challenges for research” by E. Mostert and S. J. Junier***

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The fundamental aim of this article is a valuable one, for it makes good use of the European Floods Directive as a vehicle for discussing some key research topics. However, this is an ambitious aim and the article fails to use or define its terms with sufficient rigour or to raise some of the fundamental debates that define the research agenda in some of the areas discussed. It would benefit from taking a more critical look at the Directive and what it sets out to achieve and from identifying with greater precision how social science and natural science research can contribute to those aims. Finally, although the language used is wonderfully clear, the logical flow of the argument is sometimes less so.

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### Key points:

1/ The treatment of specific research areas sometimes omits key issues. For example, many of the big difficulties with flood maps are not mentioned. In England and Wales the patchiness of the availability and quality of flood risk data caused the Environment Agency enormous problems, as too did the need to publish maps that were relatively simple. Some argue that the eventual compromise (high levels of consistency between areas and high levels of simplicity) has led to a substantial loss of data quality. There are also huge potential social / political implications of the maps being made public: e.g. housing blight, planning blight, insurance blight, the potential of increased anxiety as a result of increased awareness. Social research could play a key role in identifying these implications. Some mention of the implications for institutional risk management would also be interesting (see Rothstein in *Economy & Society*, 2006, 35) – e.g. what happens if developers challenge the accuracy of the maps or if people build in "safe" areas that then flood?

2/ There appears to be some confusion in the use of the term "research", which is sometimes used to describe activities normally attributed to flood risk management practitioners rather than to researchers (E.g. "assess the economically optimal level of flood protection and propose and assess measures" or "develop firm strategies")

3/ Section on "Trust". As far as I'm aware, the literature on trust deals mostly with trust of the authorities and not with trust of the researchers. I'm not aware of residents of floodplains challenging the science and believe they're more likely to challenge the integrity of the people communicating the science. Even if the authors do not agree, I'd suggest they address this point, that they add to the references used to support it, relying less heavily on non-peer reviewed conference papers.

4/ The 'overall conclusion' of the article ("that there is a big need for interdisciplinary and participatory research") needs more justification. Participatory research is neither defined nor critiqued by the authors, the discussion of interdisciplinary research is scant

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and the article as a whole does not make a case for either

5/ The section on the Directive is mostly descriptive. To enable the reader to make sense of the Directive and to understand the role to be played by research, I would suggest that she / he needs to be made aware of the social / political context of its creation and the motivation for its being written immediately after the 2002 floods.

Some more minor points (line by line):

4972.10-11 The function of this sentence is not clear 4962.8: "for research", not "to research" 4962.2: (and throughout) In English, the directive is generally known as the European Floods Directive (EFD) and not the Flood Risk Directive (FRD) 4962.7: use of the phrase "flood hazard and flood risk" is confusing at this stage in the article, when the difference between risk and hazard has not yet been discussed. 4962.9: "alternatives" to what? 4975.11 "McCarthy", not "McCarty" 4963.17: the authors need to address and problematise the term "significant" and the impact of the definition of this term for the impact of the directive 4964.15: on the one hand, the EFD seems to address all types of flooding, but the use of the term "river basins" here might lead the reader into thinking that only fluvial floods are covered. If the river basin is merely serving as a convenient unit of demarcation, I suggest this is made explicit. 4967.8-9: the EFD says that measures have to be included in plans, not that they have to be implemented. I don't see any ambiguity here. It seems clear that there is no obligation to implement. The authors might want to address this issue. What is the purpose of a directive that obliges member states to plan but not to do anything? 4970.26: both these references are to conference papers that were not peer-reviewed. Tapsell has lots of other, more appropriate, publications in peer-reviewed journals. 4975: ambiguous sentence structure. Use "might" instead of "may" (the term "may" denotes that something has been permitted, not that it is possible). More importantly, do the authors mean that public acceptance might be low or that lack of trust might be the reason that it is low?

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