Nat. Hazards Earth Syst. Sci. Discuss., 2, C564–C565, 2014
www.nat-hazards-earth-syst-sci-discuss.net/2/C564/2014/

Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Risk to life due to flooding in post-Katrina New Orleans" *by* A. Miller et al.

A. Miller et al.

alissa.l.miller@gmail.com

Received and published: 7 May 2014

1)"What is novel in the methodology and/or the application. Highlighting that in the paper would make it easier to justify publishing the paper"

The authors could emphasize in the introduction that one aspect of the method that is new is that life loss (or risk to life) is quantified and compared with other sectors and decision criteria. This is not a common metric quantified and discussed in flood risk infrastructure. Also, the use of a full risk assessment instead of a scenario or hazard mapping approach to communicating flood risk has benefits that could be discussed.

2)"Perhaps the book Large-Scale Floods Report should be a starting point in such a discussion, also because it specifically addresses post-Katrina findings"

Indeed Flood risk analysis is used in many countries (I could add this reference for state of the art), but FRA's are generally focused on economic risk and less on risk to life.

3) "I miss detail on construction of the scenarios. As an example, why is it assumed that 90% is evacuated?"

The 90% is based on previous studies and observations for Katrina where 80% of the population evacuated (see Wolshon references). Here it is assumed that evacuation since Katrina has improved due to improvement of planning.

4) "Why has New Orleans developed in a way where the differences between generally acceptable criteria and actual risk are so large?"

The authors would reply that no-one compared actual vs. accepted risk (as that is not part of the policy). In the Army corps planning policy for example, the only way to currently justify a flood risk reduction project is economically. An economically justified level for Pre Katrina New Orleans would have been far less than what would meet an acceptable safety risk. There could also be further discussion for acceptable risk. In America some say acceptable risk should be higher for levee safety as it is a voluntary action.

5) "Why has the post-Katrina decisions been so different from post-1953 decisions in the Netherlands and how does this impact the construction of scenarios?

The authors would argue is is largely not that different, as both the Netherlands post 1953 and New Orleans decided to invest in major prevention / protection.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 825, 2014.