

## Preparedness is Overrated: Community Responses to Floods in a Context of (Perceived) Low Probability

**Authors :** Kim Anema, Matthias Max, Chris Zevenbergen

**Abstract :** For any flood risk manager the 'safety paradox' has to be a familiar concept: low probability leads to a sense of safety, which leads to more investments in the area, which leads to higher potential consequences: keeping the aggregated risk (probability\*consequences) at the same level. Therefore, it is important to mitigate potential consequences apart from probability. However, when the (perceived) probability is so low that there is no recognizable trend for society to adapt to, addressing the potential consequences will always be the lagging point on the agenda. Preparedness programs fail because of lack of interest and urgency, policy makers are distracted by their day to day business and there's always a more urgent issue to spend the taxpayer's money on. The leading question in this study was how to address the social consequences of flooding in a context of (perceived) low probability. Disruptions of everyday urban life, large or small, can be caused by a variety of (un)expected things - of which flooding is only one possibility. Variability like this is typically addressed with resilience - and we used the concept of Community Resilience as the framework for this study. Drawing on face to face interviews, an extensive questionnaire and publicly available statistical data we explored the 'whole society response' to two recent urban flood events; the Brisbane Floods (AUS) in 2011 and the Dresden Floods (GE) in 2013. In Brisbane, we studied how the societal impacts of the floods were counteracted by both authorities and the public, and in Dresden we were able to validate our findings. A large part of the reactions, both public as institutional, to these two urban flood events were not fuelled by preparedness or proper planning. Instead, more important success factors in counteracting social impacts like demographic changes in neighborhoods and (non-)economic losses were dynamics like community action, flexibility and creativity from authorities, leadership, informal connections and a shared narrative. These proved to be the determining factors for the quality and speed of recovery in both cities. The resilience of the community in Brisbane was good, due to (i) the approachability of (local) authorities, (ii) a big group of 'secondary victims' and (iii) clear leadership. All three of these elements were amplified by the use of social media and/ or web 2.0 by both the communities and the authorities involved. The numerous contacts and social connections made through the web were fast, need driven and, in their own way, orderly. Similarly in Dresden large groups of 'unprepared', ad hoc organized citizens managed to work together with authorities in a way that was effective and speeded up recovery. The concept of community resilience is better fitted than 'social adaptation' to deal with the potential consequences of an (im)probable flood. Community resilience is built on capacities and dynamics that are part of everyday life and which can be invested in pre-event to minimize the social impact of urban flooding. Investing in these might even have beneficial trade-offs in other policy fields.

**Keywords :** community resilience, disaster response, social consequences, preparedness

**Conference Title :** ICFR 2015 : International Conference on Flood Resilience

**Conference Location :** Paris, France

**Conference Dates :** September 21-22, 2015