



Spatial and temporal spread of flood mitigation measures implemented by private households along the Rhine and their effectiveness

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Floods in Europe caused substantial economic damage in recent decades. In the future, flood risk is projected to increase in many places due to the effects of climate change and on-going socio-economic development in flood-prone areas. To reduce the economic impact of current and future floods, damage mitigation measures implemented by private households are increasingly considered as an important component of integrated flood risk management approaches.

However, knowledge about the temporal and spatial spread of flood mitigation measures such as water barriers or adapted building use are often lacking. Moreover, estimates of the effectiveness of these measures are still scarce. To gain further insights into these aspects, we will present empirical data from a computer-aided telephone survey among 752 private households along the German part of the River Rhine. It will be discussed to what extent various types of flood mitigation measures have been implemented by private households in flood-prone areas over time. Currently, we find that several measures, e.g. flood-adapted building use are regularly employed by the population at risk (34 per cent). We will examine to what extent the deployment of these measures effectively contributes to damage reduction.