Geophysical Research Abstracts, Vol. 9, 08930, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-08930

Living a thirty year return flood: results from a post-crisis inquiry at basin scale

E. Masson

UFR of Geography, University of Sciences and Technologies of Lille, Villeneuv Ascq, France (eric.masson@univ-lille1.fr Phone: +33.(0)3.20.33.70.56)

During the last decade, North Western and Central European floods have offered many case studies of risk analysis in many topics (i.e. flood processes, socio-economical impacts . . .). Most of those results have been aggregated at regional scale or focused on very local areas. But operational floodrisk management requires local knowledge at basin scale to set a planning and a prevention response that fit ground truth and population-decision makers needs both in emergency and reconstruction periods. In this communication we propose to focus on two topics. The first one is an analysis of French flood protection policies during the twentieth century. This evolution is actually following most of the historical French flooding events and gives some elements of response about the lack of regulation that has affected the recent urbanisation of many French floodplains.

The second topic relate to a methodological approach and results obtained after a thirty year return flood inquiry led at local, valleys and basin scales. This methodology was based on a large participative step (i.e. 141 municipalities, various state and regional services) and a self-managed questionnaire that has been distributed in the flooding areas within the post-crisis period in the Eure basin (Paris Basin, France). Following the idea that we are building today the historical data for the future, the main objective of this experience return was to create a reference status of socio-economical impacts that could be used as a benchmark for the next flooding events. The inquiry was relating to private housing that has broadly extended in floodplains since the last historical flooding event of 1966. This phenomena witch is still ongoing results from a lack of efficiency of floodrisk integration and policy in the urban management plans.

The questionnaire used was focusing on flood consequences with quantitative (i.e.

water levels in different properties, economical losses ...) and qualitative (i.e. year of construction, architectural types ...) approaches. Another issue was to analyse the perception of this thirty year return event (i.e. natural processes and human impacts on floodrisk) and its consequences (i.e. impacts on mobility, work, everyday life ...). Indeed, submersion duration of this slow floodplain event which has affected the whole of the studied valleys locally exceeded fifteen days and has deeply affected the local population. A last issue was also to analyse population opinion on flood consequences responsibilities and solutions that could be applied to reduce those consequences for the next flooding event. Thus, the flooded population delivers its representations of actor's role in urban and regional planning regarding to flood risk management and prevention. All the collected information based on local knowledge has fed a geodatabase built with a GIS to implement a flood risk memory. Since this information is available, it has been used to adapt prevention actions and emergency response to local stakes. Moreover, this operational method makes it possible to initiate a broad dialogue between the victims, the territorial actors and the state services to develop a better flood risk assessment in the implementation of local urban management plans.

This communication will present some solutions to cope increasing urban pressure on floodplains witch is commonly observed in many European countries and to fulfil some of the European Water Directive guidelines (i.e. water mass unit / basin scale management and public participation enhancement).