

**ERA-NET CRUE Funding Initiative
Research project fact sheet**

**Efficiency of non-structural flood mitigation measures:
"room for the river" and "retaining water in the landscape"**

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Executive summary

Floods are the costliest natural hazard in the world. A review of the losses caused by floods events in the period of the last ten to fifteen years indicate that in Europe economic losses are dramatically increasing, mainly because there has been a marked increase in the number of people and economic assets located in flood hazard zones. Flood risk mitigation can be done reducing vulnerability and/or hazard in order to reduce the total flood impact. The aim of this project is to examine the relative efficiency of non-structural flood mitigation measures. To do this, new scientific frameworks and technical tools integrating multidisciplinary approaches (meteorological, hydrological, hydraulics and socio-economical) on flood risk assessment will be used and tested in three different and, at the same time, complementary case study areas. Three study catchments will be selected, the semiarid Rambla del Poyo in Spain (380 km²), the humid/midland Kamp in Austria (1500 km²), and the alpine/prealpine Iller in Germany (950 km²). The floods in these catchments cover a wide spectrum of processes to be expected in the European Research Area.

Intended outcome

This project will focus on a comparison of the efficiency of non-structural flood mitigation measures. In particular measures which realise the non-structural flood risk mitigation concepts "retain the water in the catchment" and "room for the river" will be evaluated: Land use changes (agricultural to forest; local infiltration in urban areas), local retention measures in the landscape through micro ponds and Flood retention along the main stream by providing inundation area.

Dissemination and implementation actions

End-users panel, which will be involved in the project through a two-way exchange of ideas and a seminar in each study catchment. Dissemination mechanisms will include the project web page scientific publications, attendance and communications to symposiums and conferences, etc.

Methods and data to be intended to use

The project is divided in 4 work packages: 1.- generating scenarios, 2.- basin hydrology, 3.- flood prone area analysis, and 4.- flood impact and non structural measures evaluation.

Geographical focus of research (test sites)

Rambla del Poyo (Spain), Kamp catchment (Austria) and Upper Iller catchment (Germany-Austria).

Project duration

18 months: from Feb. 2007 to Jul. 2008

Project costs [€]

240.425

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Spain, Germany and Austria

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