

The appraisal of human related intangible impacts of flooding

Technical Summary FD2005

Joint Defra / EA Flood and Coastal Erosion Risk Management R&D programme

Background to R&D project

Much work has been carried out to develop methods and collate data for the economic assessment of physical damages due to flooding. This project was commissioned to improve understanding of the impact of flooding on people in terms of health and stress and consider how this major area of intangible impacts might be incorporated routinely into the economic appraisal of flood alleviation projects.

Results of R&D project

Through focus groups and trial surveys the project developed a robust methodology for eliciting health impacts and valuations from both those households who had been flooded and those at risk. It then applied this methodology through a detailed survey of 1510 households in 30 locations across England and Wales. 983 of these households had been recently flooded and 527 were in areas at risk. The results of this survey were analysed in the final report and provide a detailed profile of health impacts on those flooded. The results of the associated willingness to pay study indicate that the overall mean of willingness to pay to avoid such impacts was of the order of £200 per property per year for those with recent experience of flooding and some £150 per household per year for those at risk.

R&D Outputs and their Use

The project report provides full details of the development of the survey methodology and analysis of the survey results. It also provides a detailed methodology for using the results to estimate the economic impact of these health effects in project appraisal. A simplified version of this methodology has now been circulated to all operating authorities in England and is available as supplementary project appraisal guidance at:

<http://www.defra.gov.uk/enviro/fcd/pubs/pagn/fcdpag3/pag3suppjuly04.pdf>.

This R&D Technical Summary relates to R&D Project FD2005 and the following R&D output:

- **R&D Technical Report FD2005/TR** - The Appraisal of Human-Related Intangible Impacts of Flooding. Published September 2004.

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The above outputs may be downloaded from the Defra/EA R&D Programme website

(<http://www.defra.gov.uk/enviro/fcd/research>), there is a search tool located on the project information and publications page. Copies are held by all EA Regional Information Centres, contact the The Environment Agency's National Customer Contact Centre by emailing enquiries@environment-agency.gov.uk or by telephoning 08708 506506.



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