Flood risk and insurance loss potential in the Thames Gateway

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The Thames Gateway, currently Europe’s largest regeneration project, is an area of redevelopment located in the South East of England, with Government plans to create up to 160,000 new homes and 180,000 new jobs by 2016. Although the new development is intended to contribute £12bn annually to the economy, the potential flood risk is high, with much of the area situated on Thames tidal floodplain and vulnerable to both storm surges and peak river flows. This poses significant hazard to those inhabiting the area and has raised concern amongst the UK insurance industry, who would be liable for significant financial claims if a large flood event were to occur, particularly with respect to the number of new homes and businesses being built in flood risk areas. Flood risk and the potential damage to both lives and assets in vulnerable areas have gained substantial recognition, in light of recent flooding events, from both governmental agencies and in the public’s awareness of flood hazard. This has resulted in a change in UK policy with planning policy for flood risk (PPS25, Planning Policy Statement 25) adopting a more strategic approach to development, as well as a new Flooding and Water Bill which is due for consultation in 2009. The Government and the Association of British Insurers, who represent the UK insurance industry, have also recently changed their Statement of Principles which guides provision of flood insurance in the future.

This PhD research project aims to quantify flood risk in the Thames Gateway area with a view to evaluating the insurance loss potential under different insurance and planning scenarios. Using current sources of inundation extent, and incorporating varying insurance penetration rates and degrees of adoption of planning policy and guidance, it focuses on estimating flood risk under these different scenarios. This presentation introduces the development of the project and the theory and methodology which will be used to address the research problem, and presents the initial findings, including an overview of the major developments going ahead in the area and an indication of areas of high asset value and potential for inundation based on topography and standard of protection of defences.