



# Whitaker Institute Policy Brief Series

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### Further Reading:

McDermott and Surminski (2018) "How normative interpretations of climate risk assessment affect local decision-making: an exploratory study at the city scale in Cork, Ireland", *Phil. Trans. R. Soc. A* 376: 20170300.

Surminski (2017) "[Fit for the future? The reform of flood insurance in Ireland: resolving the data controversy and supporting climate change adaptation](#)". Grantham Research Institute Policy paper.

McDermott (2016) "Investing in Disaster Risk Management in an Uncertain Climate". World Bank Policy Research Working Paper, WPS7631.

Kocornik-Mina, Michaels, McDermott and Rauch. 2015. "Flooded Cities". CEP Discussion Paper No. 1398.

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**Read More About:** The Socio-Economic Marine Research Unit Cluster (SEMURU) within the Whitaker Institute for Innovation and Societal Change [here](#)

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## Translating flood risk assessment into local urban action

Urban areas are already suffering substantial losses in both economic and human terms from climate-related disasters, including flooding. These losses are anticipated to grow substantially in the coming decades, while local planning decisions today will have a large bearing on future costs, for example by locking-in future exposure to flood risk (Kocornik-Mina et al. 2015). As yet it is unclear how climate risk assessment at the global, national and regional levels can support city-level action. Research on flood risk management in Cork city by SEMRU, in collaboration with the London School of Economics, highlights that there are fundamental challenges that can hamper action, despite ever more accurate data and an increasing range of theoretical approaches available to local decision-makers.

### Research Findings

The Cork case study –based on a series of interviews and workshops – highlights the importance of stakeholder engagement as a means of overcoming these challenges (McDermott and Surminski, 2018). Local decision making requires normative decisions, for example in defining objectives and in determining what exactly is meant by a "cautious approach" and how "acceptable" risk levels are defined (and by whom). Competing political pressures also pose challenges to decision makers – for example, where urban areas are expanding the pressure on city planners is "to do it yesterday", but that needs to be balanced against the requirement for good planning. These challenges are exacerbated by uncertainties around future risk. In particular, the uncertainty in relation to the effects of climate change has been considered by some stakeholders in Cork as a "grenade" used in local debates to derail proposals. With more and more data becoming available, local decision makers will need to develop skills and invest time to carefully interpret risk information, and to understand its limitations.

### Policy Implications

The example of Cork illustrates the complexities of translating risk assessment into local action. The city appears to fulfil all the usual criteria for supporting urban action: awareness and acknowledgement of flood risk and climate change as threats; regular flooding as a reminder of the urgency and scale of the risks; technical expertise at local and national level; allocation of funding for flood risk management work; and the availability of detailed risk assessment data, in particular through the OPW's CFRAM programme ([www.cfram.ie](http://www.cfram.ie)). Local officials can also draw on national level guidance and a range of theoretical approaches in making risk management decisions ([www.climateireland.ie](http://www.climateireland.ie)). However, as highlighted by the Cork example, it is the interpretation and the application of those that determine if and what action is taken. While uncertainty in climate projections adds a layer of complexity to local decision making, it need not become a barrier to action (McDermott, 2016). A shared understanding of risk at a local level, perhaps facilitated by a boundary organization (such as the newly established Climate Action Regional Offices) represents a crucial step in diffusing controversy, achieving greater transparency, and ultimately delivering timely local adaptation to climate risk.