

# Flood risk management in Ireland - IE

## 1. Policy Objective & Theme

- ADAPTATION TO RISK: Preventing and managing natural hazards and technological (human-made) hazards
- ADAPTATION TO RISK: Integrating coherent strategies covering the risk-dimension (prevention to response) into planning and investment
- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space

## 2. Key Approaches

- Integration
- Technical

## 3. Experiences that can be exchanged

The River Lee Catchment Flood Risk Assessment and Management (CFRAM) Plan sets out a range of measures to manage effectively and efficiently the flood risk in the Lee Catchment, which should significantly reduce the likelihood of severe flooding. Other pilot CFRAM Studies are progressing in the Dodder and Suir Catchments, and in the Fingal – East Meath Area, with a view to national roll out of the CFRAM Studies for catchments all over the country.

## 4. Overview of the case

This integrated approach to co-ordination of activities relating to flood risk management could be a useful model for other EU Member States given the recent adoption of the Floods Directive and increased risk of flooding in light of climate change. In this context, the management role of the coordinating authority, the Office of Public Works, covers flooding from, and flood defences along, rivers; coastal flooding and defence (including coastal erosion); storm water drainage and land drainage and river maintenance.

## 5. Context and Objectives

### a) Context

Parts of Ireland, both inland and coastal, suffered extensively from extreme flood events in 2002, 2004 and again in 2009. A report from a Flood Review Group in 2004 emphasised the need to be proactive in flood risk management. This report recognised that planning and development management should be a key component of the strategy for achieving this objective. The direct response to this report was publication of agreed Planning Guidelines in November 2000). These Planning Guidelines apply to local authorities and must be taken into account in their decision-making process for development planning. In addition to proactively managing flood risk, the Planning Guidelines complement other national strategies such as the national Climate Change Strategy (2000), Making Ireland's Development Sustainable (2002) and the National Spatial Strategy (2002-2020). The Planning Guidelines are not considered to be a transposition measure of the Floods Directive but is an important initial step in Ireland's broader adaptation to a climate change framework. A specific Statutory Instrument (SI) transposing the Floods Directive into Irish law was signed by the Minister for Finance in March 2010. The SI appoints the Officers of Public Works in Ireland as the Competent Authority under the Directive, reinforcing the Lead Agency role the OPW was given in 2004. The SI also identifies roles for other organisations, such as the local planning authorities, Waterways Ireland and the Electricity Supply Board (ESB), to undertake certain duties with respect to flood risk within their existing areas of responsibility.

## b) Objectives

The Planning Guidelines allow the adoption of a chronological approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk. Furthermore the Planning Guidelines provide that flood risk assessment can be incorporated into decision-making on development planning. Another core objective of the Planning Guidelines is to improve the understanding of flood risk among relevant stakeholders providing them with information on who is where responsible and what they should do in the aftermath of a flood event.

## 6. Implementation of the ICZM Approach (i.e. management, tools, resources)

### a) Management

The OPW has a role in co-ordinating and integrating national flood risk management direction and the actions and activities of Government Departments, local authorities and other key stakeholders although is not directly responsible for all aspects of flood management.

### b) ICZM tools

The Planning Guidelines were issued by the Minister of the Environment, Heritage and Local Government under Section 28 of the Planning and Development Act, 2000. This means that planning authorities and An Bord Pleanála [Irish Planning Appeals Board] are required to have regard to the Guidelines in carrying out their functions under the Planning Acts. A number of key principles are inherent in delivering the aims and objectives of the Guidelines. This includes avoiding risk, where possible; substituting less vulnerable uses, where avoidance is not possible, and mitigating and managing risk, where avoidance and substitution are not possible. According to the Planning Guidelines “flood hazard and potential flood risk from all sources should be identified and considered at the earliest possible stage in the planning process and as part of an overall hierarchy of national responses coupled to regional appraisal and local and site-specific assessments of flood risk”.

The Planning Guidelines advocate a precautionary approach in order to reflect uncertainties in flooding datasets and risk assessment techniques and the ability to predict the future performance of existing flood defences. This fits well with adaptation to climate change. Both the flood maps and the identification and outline design of flood risk management measures, under the CFRAMS programme, will consider a range of potential future scenarios, including the potential impacts of climate change, ensuring that capacity for adaptation is built into the flood risk management strategy and measures. As the Planning Guidelines sit within a broader planning and development framework, it is now essential that Strategic Environmental Assessment (SEA) of such broader plans (e.g. county development plans, local area plans and regional planning guidelines) must include flood risk as one of the key environmental criteria against which such plans are assessed where flood risk has been identified. This provides an opportunity to consider flood risk within broader environmental and societal considerations and is inherent in the CFRAM programme. Likewise SEA and Appropriate Assessment under the Habitats Directive (subject to screening) are an integral part of the CFRAM Study process, as is co-ordination with implementation of the Water Framework Directive. Overall this leads to a much more integrated management approach to flood risk management. Similarly at the project level, development either exceeding the specified thresholds for Environmental Impact Assessments (EIA) or development under the thresholds but with significant environmental effects and in an area of flood risk will require an Environmental Impact Statement (EIS) [term used in Irish law for EIA]. Flood risk will therefore also become an inherent part of the EIA process.

## 7. Cost and resources

No information is available for implementation of the Planning Guidelines on Flood Risk Management. With respect to the CFRAMS project indicative costs and resources are specified in the Lee CFRAMS study.

## 8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

As the Planning Guidelines were just recently published it is unknown as yet as to whether they will successfully address flood risk management within the planning system at national and local levels. The Planning Guidelines are accompanied by a

separate document containing technical annexes, which planning authorities and applicants can use in addressing more detailed implementation of the Planning Guidelines. These annexes may be updated and distributed regularly to reflect improvements in flood risk and climate change data as well as techniques in flood risk assessment. As such the Planning Guidelines represent a flexible tool for addressing flood risk management in the terrestrial planning process. The CFRAMS programme, as well as delivering on national policy, meets the requirements of the Floods Directive which requires the production of flood maps for Areas of Potentially Significant Risk (APSR) by the end of 2013, and development of FRMPs to manage risk within the APSRs by the end of 2015. Upon completion of the FRMPs in 2015, flood risk management measures will have been identified for areas of significant risk around the country. These measures will be prioritised to determine, subject to 6-yearly reviews and, response to the need for emergency works, the long-term investment programme for flood risk management in Ireland.

## 9. Success and Fail factors

Unknown as yet.

## 10. Unforeseen outcomes

Unknown.

## 11. Prepared by

Anne Marie O'Hagan, Hydraulics & Maritime Research Centre, University College Cork, Ireland.

## 12. Verified by

Jim Casey, Senior Engineer, Coastal Protection, Office of Public Works, Dublin, Ireland.

## 13. Sources

- DEHLG and OPW. 2009 The Planning System and Flood Risk Management - Guidelines for Planning Authorities. Published by the Department of the Environment, Heritage and Local Government and the Office of Public Works, Dublin. November 2009. 81pp. Available from: <http://www.opw.ie/en/media/Planning%20System%20&%20Flood%20Risk%20Management%20-%20Guidelines%203011>
- Flood Review Group. 2004. Report of the Flood Policy Review Group. Government of Ireland, Dublin. 236pp. Available from: <http://www.opw.ie/en/media/Report%20of%20the%20Flood%20Policy%20Review%20Group.pdf>
- [http://www.iae.ie/site\\_media/pressroom/documents/2010/Feb/26/IAE\\_Report\\_web.pdf](http://www.iae.ie/site_media/pressroom/documents/2010/Feb/26/IAE_Report_web.pdf)
- Irish Academy of Engineering. 2009. Ireland at Risk, No. 2 - Critical Infrastructure Adaptation for Climate Change. Irish Academy of Engineering, Dublin. Available from: [http://www.iae.ie/site\\_media/pressroom/documents/2009/Nov/17/Ireland\\_at\\_Risk\\_2.pdf](http://www.iae.ie/site_media/pressroom/documents/2009/Nov/17/Ireland_at_Risk_2.pdf)
- Irish Academy of Engineering. 2010. Infrastructure for an island population of 8 million. Irish Academy of Engineering, Dublin. Available from:
- Office of Public Works, Cork City Council and Cork County Council. 2010. Lee CFRAMS - Draft Catchment Flood Risk Management Plan, February 2010. Office of Public Works, Dublin. Available from: <http://www.opw.ie/en/media/Lee%20CFRAMS%20Draft%20Catchment%20Flood%20Risk%20Management%20Plan.pdf>
- Office of Public Works. 2010. Press Release: Mansergh Announces Transposition Into Law of the EU "Floods" Directive. 19 March 2010. Available from: <http://www.opw.ie/en/LatestNews/Title,12942.en.html>



IAE\_Report\_web (3 MB)



Ireland\_at\_Risk\_2 (1.88 MB)

-  Lee CFRAMS Draft Catchment Flood Risk Management Plan (12.89 MB) 
-  Planning System & Flood Risk Management - Guidelines 301109 (1.83 MB) 
-  Report of the Flood Policy Review Group (1.58 MB) 
-  manseragh press release (27.09 KB) 