

Flood Risk Management



Partnership for Change
Climate Change Conference
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Objectives of Paper

- To set out the present approach to flood risk management
- To identify some issues for discussion



National Flood Policy Review (1)

Initiated: January 2003

- Inter-Departmental Review Group
- Report approved by Government and published:
September 2004

SCOPE

- Roles and responsibilities
- Policy for flood management in the future



National Flood Policy Review (2)

- *To minimise the national level of flood risk to people, businesses, infrastructure and the environment, through the identification and management of existing, and particularly potential future, flood risks in an integrated, proactive and catchment-based manner.*



National Flood Policy Review (3)

REVIEW OUTCOMES

- **KEY RECOMMENDATIONS**
 - Roles and Responsibilities : OPW Lead Agency
 - Role of Local Authorities; D/EHLG; D/AFF
 - Flood Risk Management, rather than Prevention
 - Greater emphasis on non-structural measures



Policy Implementation

- **MANAGEMENT STRUCTURE**
 - Inter-departmental coordination group
 - Steering groups (specific areas of work)
- **WORK PROGRAMMES:**
 - Strategic information base
 - Non-structural FRM capacity
 - Most important are:
 - Catchment Flood Risk Management
 - Planning & Development Management
 - Flood Mapping
 - Capital Works



Catchment Flood Risk Management

- *To develop and implement an integrated, pro-active and catchment-based approach to ensure effective management of existing and potential future flood risks*
- **Objective**
 - Assess flood risk in a catchment
 - Identify future land use & climate changes that may increase risk
 - Strategic Environmental Assessment SEA
 - Options to manage flood risk –structural & non-structural
 - Develop long term strategy – CFRMP
- Pilot project River Lee - www.leecframs.ie



Planning & Development Management

- Planning and Development Act (2000)
 - allows Planning Authorities to refuse planning permission without compensation for developments at risk from flooding.
- Guidelines have been developed by OPW, DoEHLG & DAFF
- Issued for comment – Section 28



Flood Mapping

- First phase – historic mapping –
 - Website launched in October 2006
 - www.floodmaps.ie
- Next stage - predictive flood envelopes, mapping of the most likely future scenarios, including climate change
- Some issues to be dealt with
 - Defining floodplains, Reaction of public; impact on property values; perception of risk



Capital works programme

- Existing flood risk – constructed flood defences
- Schemes
 - on site: Clonmel, Mallow, Ennis
 - With Local Authority: Carlow, Waterford
 - Design stages: Enniscorthy, Arklow, Bray,
- Budget allocation for 2009 €50m.



EU 'FLOODS' DIRECTIVE

- Entered Into Force: November 2007
- Transposed – November 2009
- Sets out specific dates for actions



EU 'FLOODS' DIRECTIVE

- **KEY REQUIREMENTS**
 - Preliminary flood risk assessment
 - Flood maps
 - Flood risk management plans
- **OTHER PROVISIONS**
 - Co-ordination with WFD implementation
 - Trans-boundary co-operation



Summary

- New policy - in line with developments elsewhere in Europe
- Framework to allow future scenarios and emerging risks to be addressed
- Meet our obligations under the forthcoming EU floods directive
- Some challenges remain



Challenges and Issues for Discussion

- A number of challenges and issues
 - Uncertainty
 - Adaptability
 - Design standards & methodologies
 - Planning & Development
 - Mitigation measures
 - Engineering skills



Uncertainty

- Associated with the climate change scenarios being developed by climate scientists.
- Requires policies that respond to emerging scientific data and impacts



Adaptability

- Linked to uncertainty
- Flood defences designs carried out to current estimates of flows.
- Make provision for anticipated impacts from climate change



Design Standards

- Level of protection of flood defences will be reduced as a consequence of predicted changes to our climate
- Methodologies are based on historic records of flows – assumed statistically stationary
- Climate change scenarios emerging - fundamental assumption is invalid



Adequacy of existing defences

- Significant flood defence assets in existence
- Not always known as a flood defence or maintained
- Develop a Flood Asset Register as part of the CFRAM studies
- Assess of the level of protection



Resilience

- Resilience of buildings design and construction to the effects of flooding.
- Overlaps with our Building Regulations area of responsibility
- Association of British Insurers publication



Engineering skills

- Engineering skills in the specialist areas of hydrology and river engineering required to meet the needs of society was identified in the UK by the ICE as a critical issue in meeting future requirements.



Conclusion

- Flood policy in line with European developments
- Impacts of various climate change scenarios need continued examination
- Right direction;
- Balance between non-structural and constructed measures
- Well-placed to meet future challenges