



Environmental Pillar
OF SOCIAL PARTNERSHIP



Environmental Pillar

Policy Statement on the

Flooding Crisis Nov 2009

- A call for a comprehensive and systemic review

3rd Dec 2009



Environmental Pillar
OF SOCIAL PARTNERSHIP

Introduction

If there's anything to be learned from the ongoing catastrophic flooding events happening across Ireland, it's that we need to work with nature not against it to prevent further disaster. This has been the message from environmental groups for many years now. Combined with climate change, bad planning and development leading to wetland damage and infilling have been major factors contributing to the current disaster. The movement of waters from the headlands of a catchment to the sea must be slowed down to help prevent flood surges such as those experienced all over Ireland in these last weeks.

The environmental pillar has demonstrably exercised foresight, expert knowledge and skills in the area of flood adaptation and mitigation and would strongly recommend that our proposed measures are acted on immediately to prevent further flooding chaos in the near future. This document will examine the causes of current excessive flooding and propose measures for the way forward.

The Causes of the Problem

There are two main reasons for the increased frequency and severity of flooding in Ireland. The first and most significant is man made climate change. As a consequence of climate change the frequency distribution and statistical variance of "extreme" weather events has become erratic - to the extent that hitherto "normal" flood return frequencies must be dramatically reconsidered and planning guidelines recast accordingly. The *National Climate Change Strategy for Ireland*¹ published in 2000, outlines the threat posed by climate change to Ireland. The report predicts: an increase in the severity of floods due to significant increases in winter rainfall, with the average winter water levels in rivers, lakes and soils higher than at present and with more frequent severe flooding; and an increase in the number of places affected by floods.

The second is man's interference with the natural drainage patterns of the landscape. It is important to note that floods are natural phenomena; however, society has become more vulnerable to these natural hazards due to interventions into the processes of nature, such as alterations in the drainage patterns from urbanisation, agricultural practices and deforestation. The problem of flooding has been made worse by unsustainable spatial planning, the type of defence mechanism chosen against floods, and the way river catchments are being managed. Up to now there has been a culture of 'opportunistic rezoning of land by county councillors', The massive drainage and hedge clearances that took place through the Farm Modernisation Scheme over 40 years have also contributed to the disaster. Currently national policy fails to prioritise protection of our ecosystem services. Wetlands are not wastelands - they capture carbon, retain water, enhance biodiversity and are a natural flood defence.

Whilst this document was developed through the processes of the Environmental Pillar it does not necessarily represent the policies of all its members.

¹ Ireland's National Climate Change Strategy 2007-2012, DoEHLG (2000)

Link: <http://www.environ.ie/en/PublicationsDocuments/FileDownload,1861.en.pdf>

Proposed Measures

Legislation

1. **Planning Bill to prevent zoning of flood plains.** An immediate step that must be taken is to ensure that no development takes place on natural flood plains. This needs to be included in the new Planning Bill to prevent zoning of development land in flood plain areas.
2. **The Land Reclamation Act 1949 must be repealed.** Its place should be taken by a **Wetland Protection, Restoration and Wise Use Law.**

Accountability

3. **County Managers and County Councillors should be held responsible for the damage done to the public and the environment,** where respectively they have granted planning permissions and zoned lands contrary to the guidelines on flood plains.
4. **Naming and Shaming.** The media has a huge role to play here. Where is the accountability - why aren't the names of councillors who forced through rezoning in flood plains now all over the papers?

Immediate Actions

5. **Flood plains currently zoned for development must be immediately de-zoned.**
6. **All Local Authority Development Plans should be reviewed in this context**
7. **Precautionary Principle** The Minister for the Environment, Heritage and Local Government should issue a National Guideline for planning authorities, which states that local and planning authorities shall adopt the 'precautionary principle' or approach in respect of flooding when considering planning applications.
8. **Education and awareness** about flooding, the importance of wetlands and the impact of climate change is needed in all sectors especially Local Authority planning departments. The government must ensure that all members of public authorities are up to speed on these matters, to prevent decisions being taken that make matters worse.

Planning for the future

9. **Long-term thinking** is required to minimize future flooding. In terms of costing current adaptation strategies, the review the Pillar is calling for needs to carefully evaluate flood protection measures that may only provide short-term (15-25 year) relief, with the development of more comprehensive measures capable of responding to climate change effects predicted to arrive over the course of the next 25-50 years.
10. **Flood prevention, rather than flood relief should be the priority.** Other countries such as the Netherlands and UK have embarked on major setback and wetland restoration for more natural, cost effective flood management. The same schemes also improve water quality and ecology. It is most urgent that we review our policy, change our laws and carry out individual action to make us more flood-resilient.
11. **Local Resilience Plans** Communities should carry out a Risk Audit for potential serious events i.e. flood, loss of electricity for over three days, fuel shortage, closure of ports and airport and serious epidemics and prepare local Resilience Plans.
12. **River catchment management (RCM) agencies** The most effective flood relief strategy will require the integration of infrastructure and built environment agencies and planning structures into a comprehensive set of river catchment management (RCM) agencies, as opposed to the currently-existing reversed order of priorities. Decisions taken in isolation in various sectors are unsustainable, a holistic approach is needed.
13. **The location of both our drinking and waste water treatment plants** needs to be reassessed and newer technologies that would allow for safer (higher ground) sites should be considered.

Flood Prevention Methods

14. **Stop adding carbon dioxide to the atmosphere.** If climate change is left unchecked what are now freak weather events will ultimately become 'normal'. A raft of measures need to be employed to stop adding carbon dioxide to the atmosphere, starting today.
15. **Sustainable Flood Management techniques like soft engineering** are an absolute necessity. Wetlands have an essential role to play in helping us deal with these events. Hard engineering solutions are not always the answer. The movement of water through a catchment needs to be slowed down so that rivers are not overloaded by rapid drainage. The recently launched EPA Critical Infrastructure report should have had a significant part dedicated to soft engineering solutions like wetland creation and ending drainage of wetlands etc. We should be maintaining wetlands

rather than allowing water to run out of them faster. Arterial drainage of watercourses is counterproductive.

16. **Ecosystem restoration** - numerous marshes and other wetlands that were illegally filled in need to be returned to wetland so that we have a greater buffer against future heavy rain events. These natural defences are cheaper and more effective than the current hap hazard strategy of building more flood defences (prevention is better than cure) which just cause flooding elsewhere. Ecosystem restoration is in line with the EU Water Framework Directive.
17. **A national wetlands survey and review** is needed to examine the role and management of wetlands in Ireland in the face of climate change. Between 2000 and 2006 there was a reduction by 10% of wetland habitats in Co. Monaghan and this was a conservative estimate (Heritage Council funded report 2006).
18. **Incentives for wetland creation** and an audit of the role of inland wetlands and coastal habitats in helping communities to adapt to climate change and severe weather events are urgently required.
19. **Increased indigenous tree-cover**, particularly in the Shannon and Lee basins, has a role to play in lessening the impact in future years. Individual trees, hedges and woodlands significantly reduce sediment run off and forests systems can hold and recycle more water than grazing or croplands. Trees, particularly native hardwoods, absorb water by draining it from the surface via their root systems. Research results from the Flood Risk Management Research Consortium, from the Pontbren experiment in Wales(ongoing), reveal that 'introducing optimally placed tree shelter belts to the current land use (upland sheep farming) is to reduce peak flow by 29%; introducing full woodland cover would reduce flows by 50%.' (FRMRC Research Report UR 16. Project Web: www.floodrisk.org.uk 6,000 hectares of deforestation took place between 2000 and 2004 (National Forest Inventory).
20. **The removal of hedgerows and "scrubland" must be halted**, and incentives provided for their reinstatement and proper management.
21. **Clear-felling of tree-cover must be phased out in favour of continuous cover practices.** This practice leads to erosion, the creation by heavy machinery of impermeable pans, and the resulting rapid run off of storm waters. Drainage design in forestry needs re-thinking to slow down run off of surface water and sediments. Sediment not only fills rivers and streams, causing damage to ecosystems, it also impairs the natural groundwater drainage systems.

For further details please contact

Michael Ewing, Coordinator.

Environmental Pillar of Social Partnership

Tullyval, Knockvicar, Boyle, Co Roscommon

Telephone: 00353 (0)71 9667373, Mobile: 00353 (0)86 8672153

Email: michael@environmentalpillar.ie