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tcpa briefing

planning and flood risk in northern ireland

TCPA Briefing Paper 12

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1 Background

Northern Ireland's Sustainable Development Strategy adopted the precautionary approach to tackling uncertainties in the impacts of climate change and risks from flooding. Planning Policy Statement 15 (PPS15) on Planning and Flood Risk is the key policy mechanism for delivering adaptation actions in Northern Ireland. On 16 August 2010, the Minister of the Environment announced a review of PPS15.

Northern Ireland's Department of the Environment (DOE) has a duty 'to formulate and co-ordinate policy for securing the orderly and consistent development of land and the planning of that development' (Article 3 of the Planning (Northern Ireland) Order 1991). The DOE is required to ensure that such policy is in general conformity with the Regional Development Strategy 2025 – the national spatial framework for Northern Ireland. The Regional Development Strategy acknowledges that the effects of climate change will have implications for lifestyles and the form of development in the future.

PPS15 sets out national policy guidance for Northern Ireland to minimise flood risk to people, property and the environment. It embodies the Government's commitment to sustainable development and the conservation of biodiversity. It adopts a precautionary approach to development and the use of land that takes account of climate change and is supportive to the well-being and safety of people.

Like other parts of the UK, Northern Ireland experiences severe weather events, and will continue to experience them as a result of climate change in the medium to long term. According to UK Climate Impacts Programme (UKCIP) projections for

Northern Ireland, within the timeframe of the Regional Development Strategy to 2025 and under the low-emissions central estimate scenario, there is a wide range of uncertainty in the change in annual mean precipitation, from -3% to 3%. In winter, the change in mean precipitation is projected to be 3% (see <http://ukclimateprojections.defra.gov.uk/content/view/374/499/> for detailed findings and projections for Northern Ireland). Embedding flood risk management in the planning system and having a responsive planning system is crucial to securing resilience, as much of the built environment and many land use activities will either contribute to or be adversely affected by flooding events.

2 Summary of the consultation

The announcement of a review of PPS15 is in accordance with a commitment to review its operation within five years – the current version (available at http://www.planningni.gov.uk/index/policy/policy_publications/planning_statements/pps15.htm) was published in June 2006. The public consultation is part of the review of PPS15 and invites comments regarding current policies in PPS15 to facilitate the identification of issues that may need to be addressed by the review. The closing date for responses is 30 September 2010.

3 TCPA policies and key messages

The TCPA welcomes the opportunity to contribute to this review process, and commends the commitment of the Minister and the Planning Service to continue to secure the resilience of the built environment in accordance with sustainable development objectives. The TCPA believes that in addition to supporting the Planning Service and local authorities in their efforts to manage uncertainties and climate-proof and manage flooding in development, PPS15 should not be seen to be the barrier to meeting other national and local needs, such as meeting housing growth and regeneration needs where they are identified.

The TCPA is the UK's oldest planning charity and works to improve the art and science of town and country planning in accordance with the principles of sustainable development. Building on its policy and project work in planning, climate change and the environment, including knowledge gained from its lead partner role in the INTERREG IVC GRaBS (Green and Blue Space Adaptation in Urban Areas and Eco Towns) project (see <http://www.grabs-eu.org> for further details), from the planning for adaptation study carried out for the Royal Commission on Environmental Pollution (RCEP), and from preparing the *Adaptation by Design* guide, the TCPA's submission highlights the following issues and opportunities:

- **Revising the evidence base to reflect the updated climate impacts evidence base:** Since the publication of the current PPS15, the evidence base behind the climate science has moved on and has been updated by organisations such as UKCIP (UKCP09) and Foresight (the *Land Use Futures* report). The TCPA believes that **it is crucial for PPS15 to reflect the new evidence base**, in particular in paras 2.4 and 2.5 of the current PPS15. There may be an opportunity to consider undertaking a partial review of the Regional Development Strategy to ensure that Northern Ireland as a whole, in terms of institutional arrangements, policy frameworks and designated development locations, is well placed to spatially adapt to threats such as sea level rise.
- **Supporting the precautionary approach but with flexibility for local innovative engineered solutions:** The TCPA continues to support the

precautionary approach set out in Section 5 of PPS15 as the most simple and straightforward approach to avoiding risks and managing uncertainties. There is no doubt that irresponsible development on floodplains will result in increasing vulnerabilities for households and communities living on them, as well as having adverse impacts in wider issues around insurance and emergency planning. However, priorities around managing housing growth and economic development will mean that a more positive and proactive policy approach will be necessary to secure flood risk management measures early in the planning and design process.

In comparison with other UK nations' development and flood risk policy guidance (England's PPS25, Scotland's SPP, and Wales' TAN15), PPS15 currently adopts a narrow, inflexible and simplistic approach to managing flood risk (see Box 1). The historical origins of towns and cities have necessarily been located in areas of flood risk, such as in proximity to rivers and the coast. With Office for National Statistics 2008-based national population projections suggesting a 7% increase in the population in Northern Ireland by 2018, it is inevitable that it will be necessary to positively manage risks by 'making space for water' in the sustainable development of towns and cities, in particular necessary developments on floodplains in cities such as Belfast. Lessons can be learnt from European partner nations in the GRaBS project, such as the Netherlands, where positive measures have been adopted (see details of the Room for the Rivers national spatial river planning process at <http://www.ruimtevoorderivier.nl/meta-navigatie/english.aspx>).

Box 1

Summary comparison of flood risk management approaches in the UK nations

Northern Ireland PPS15	England PPS25	Wales TAN15	Scotland SPP
<ul style="list-style-type: none"> ● A precautionary approach ● Presumption against development in floodplains ● No SUDs 	<ul style="list-style-type: none"> ● Risk-based approach ● Flood risk assessments ● Sequential approach ● Sequential test ● The exception test 	<ul style="list-style-type: none"> ● Precautionary framework ● Development advice maps ● Vulnerable developments ● Assessing flooding consequences 	<ul style="list-style-type: none"> ● Precautionary approach ● Flood risk management plans ● Risk framework ● Flood risk maps

The TCPA suggests that a 'no regrets, low regrets, win-win, and adaptable measures' approach to managing climate and flood risks is more appropriate and sensible, including the explicit evaluation of viable engineering solutions rather than the restrictive 'presumption against development' policy beyond the floodplains. Planning policies in Section 8 of PPS15 should reflect this approach (see the TCPA's *Climate Change Adaptation by Design*, at <http://www.tcpa.org.uk/pages/climate-change-adaptation-by-design.html>):

- **No-regrets measures:** Those that will pay off immediately under current climate conditions.
- **Low-regrets measures:** Low-cost policies and measures that have potentially large benefits. These should be identified as early as possible in the design process, to maximise opportunities and minimise costs.
- **Win-win measures:** Policies and measures that help manage several climate risks at once, or that also bring other benefits.

- **Adaptable measures:** Flexible and resilient policies and measures, so places can adapt to a continually changing climate.

- **Emphasising the importance of spatial planning and the role of and links to up-to-date local development plans:** Good effective spatial planning should continue to underpin the plan-making work of the Planning Service and local authorities in delivering the sustainable management, use and development of land in Northern Ireland. This means ensuring that linkages are made across the different departments with functions relating to land use, with other PPSs (in particular PPS20 for the coast), and with engagement with stakeholders and local communities coastal planning. The TCPA recognises the differences between the planning systems in Northern Ireland and England and the other devolved administrations, and the opportunities presented to enable a more co-ordinated approach to development planning. Based on the findings of its study for the RCEP on the status of local plans (see Figure 1), the TCPA believes that the robustness and progress of **up-to-date local plans** will continue to play an important role in providing the right spatial framework for guiding local sustainable developments.

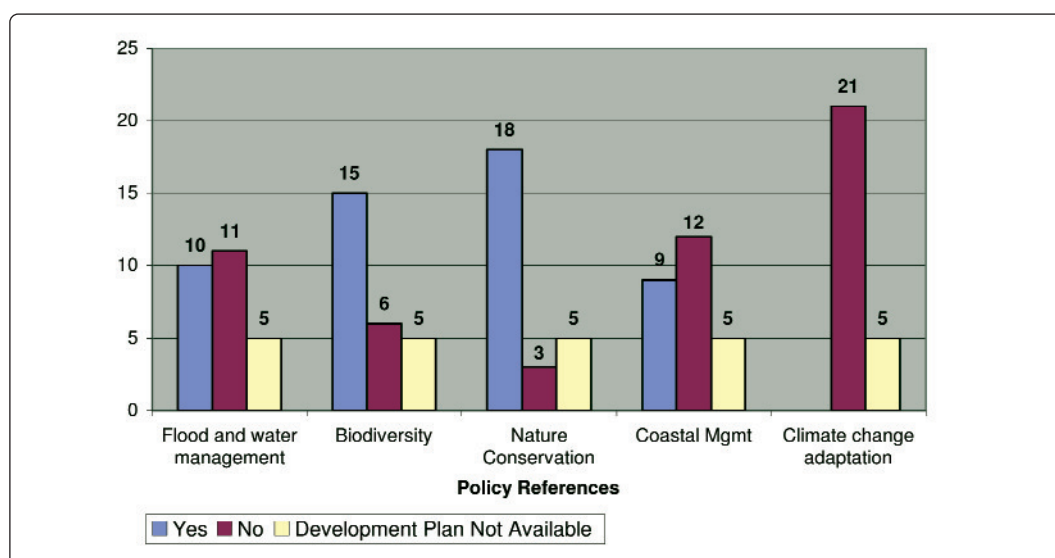


Figure 1

Development plan policy references: Northern Ireland

Source: *Helping to Deliver Climate Change Adaptation through the UK Planning System. Final Report* prepared for the Royal Commission on Environmental Pollution. TCPA, 2009.

<http://www.rcep.org.uk/reports/28-adaptation/documents/TCPA%20reportforRCEP.pdf>

- **Utilising green and blue infrastructure for flood risk management functions and to secure wider socio-economic benefit:** There is currently no reference in PPS15 to the role of green infrastructure, nor recognition of its multi-functional role in the built environment. Drawing on knowledge and Europe-wide experience from the GRaBS project, the TCPA strongly recommends that **green infrastructure should feature as a key mechanism** for delivering the objectives of PPS15 and as part of a suggested new section on implementation and review (see the next bullet point of this briefing).

Green infrastructure is a term which refers to a wide range of natural and managed green and blue spaces in different rural and urban contexts and at various 'spatial' scales. The benefits of green infrastructure are wide-ranging

and encompass social, economic, environmental and cultural values, and can meet many relevant national priorities, including flood risk management and improving water quality (further information is available in GRaBS Briefing Paper 2: *Delivering Green Infrastructure Benefits to Communities and Places through Planning*, at http://www.tcpa.org.uk/data/files/resources/887/GRaBS_Briefing_Paper_2-GI-Benefits.pdf). The use of green and blue infrastructure as Sustainable Drainage Systems (SUDS) to manage flood risk at various spatial scales is recommended (see Figure 2). In England, for example, all developments are required to have SUDS under the new Flood and Water Management Act 2010.

An example of an enabling policy for the provision of SUDS to be introduced in the revised PPS15 could be:

'Development should embed sustainable urban drainage systems (SUDS) in the design and planning process and ensure that surface water run-off is managed as close to its source as possible.'

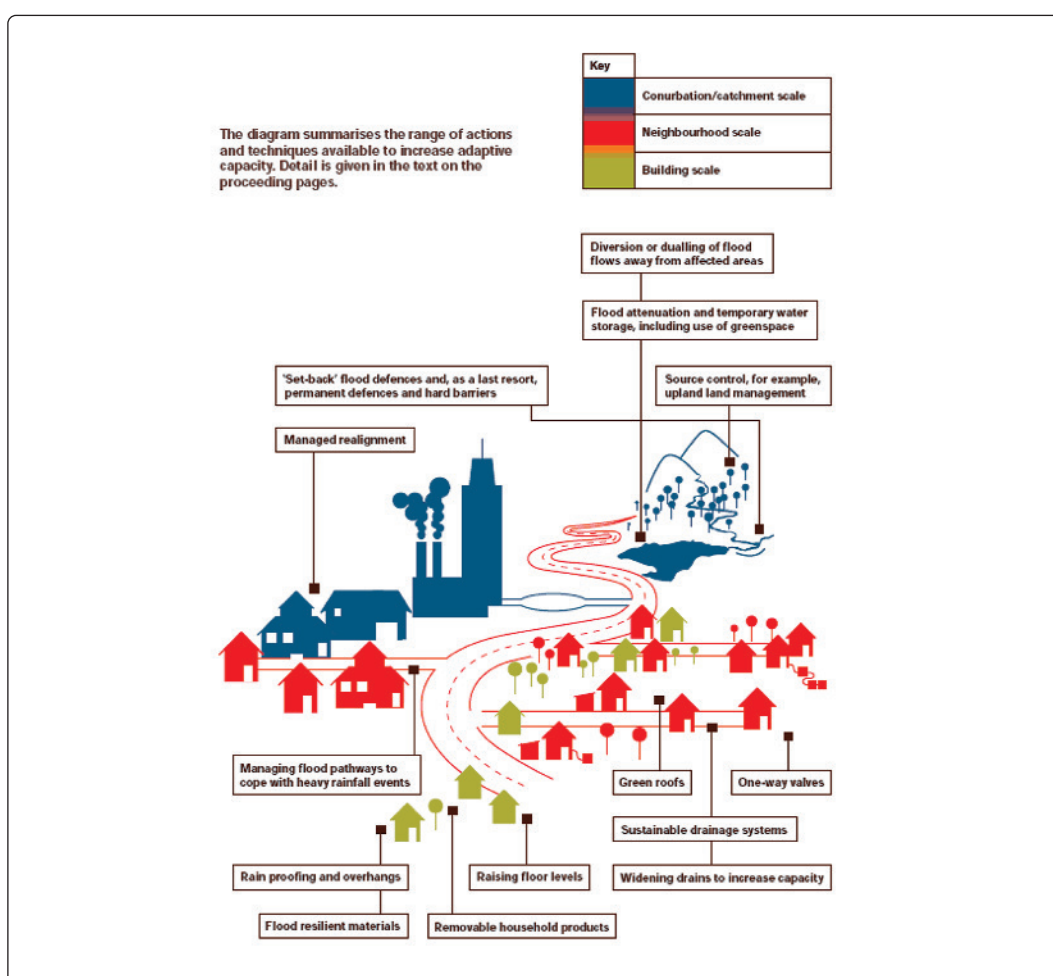


Figure 2

Strategies for managing flood risk at different spatial scales

Climate Change Adaptation by Design. A Guide for Sustainable Communities. TCPA, 2007.

<http://www.tcpa.org.uk/pages/climate-change-adaptation-by-design.html>

- **Securing mechanisms for delivery and implementation:** PPS15 provides the spatial planning policy guidance for those involved in plan-making, and in making development control and investment decisions for development, as well as for key stakeholders in their engagement with the planning system. Recent planning reform proposed the devolution of planning powers to local authorities. The TCPA identifies local authorities as best placed to take

responsibility for local flood risk management. The TCPA believes that it is necessary for PPS15 to provide further guidance to practitioners on implementation and delivery and approaches to monitoring and review.

A new section titled 'Implementation and review' is needed.

This 'Implementation and review' section should detail national and local targets and indicators for monitoring the delivery of PPS15 policies in local development, in particular using measures such as green infrastructure provision. Taking an example from European best practice, the policy could encourage the adoption of the 'Green Space Factor', used by the City of Malmö, which would ensure that a minimum amount of green space per development is achieved.

In addition, developing local adaptation strategy and action plans may prove to be an important step in improving the institutional capacity of local areas to adapt to climate change and flood risk (see Figure 3). **The TCPA offers its knowledge and experience to assist in this process.**

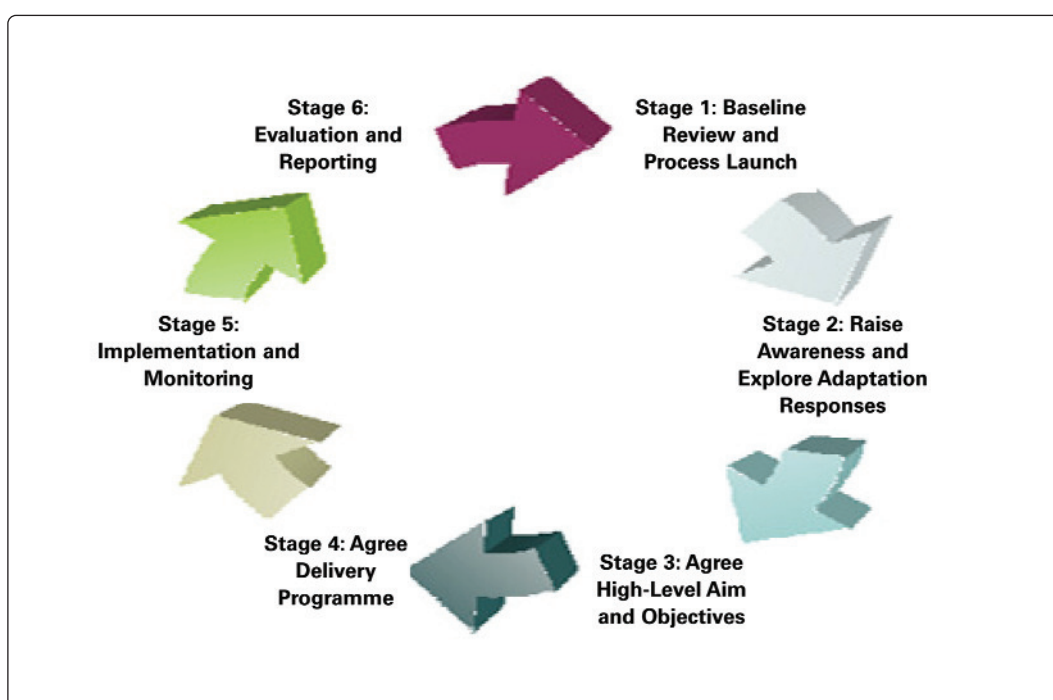


Figure 3

GRaBS project climate change adaptation action planning cycle

Source: *Climate Change Adaptation Action Plan Guidance*. GRaBS project. TCPA, 2009.

<http://www.grabs-eu.org/downloads/GRaBS3-4%20Adaptation%20Action%20Plan%20Guidance.pdf>

- **Improving skills and resources for decision-making:** To support the wider planning reforms in Northern Ireland, this period of time presents a prime opportunity to strengthen work to improve the capacity and capability of planning practitioners to deliver quality spatial plans and development projects. Specifically for flood risk management, adaptation and SUDS delivery, practitioners need to enhance their skills. Actions are being taken now in other parts of the UK in support of findings from the Pitt Review, the RCEP study, and Defra's (the Department for Environment, Food and Rural Affairs') Draft Skills Strategy, in order to understand and improve flood risk management skills by prioritising resources and engaging with key stakeholders (see Box 2).

The TCPA strongly recommends that as part of this review, similar actions and processes should be put in place to **improve skills, capacity and**

resources, in the form of further practical guidance and training modules to officers, to improve both the current work of the Planning Service and future devolved planning functions to local authorities. From its experience in delivering workshops and seminars to practitioners in England and Wales, and its knowledge of best practice in UK and across Europe, **the TCPA offers its expertise and knowledge to the Planning Service in support of planning for and delivering these suggested actions.**

Box 2

Three main themes from Defra's Draft Strategy for Skills and Capacity Building in Local Authorities for Local Flood Risk Management

- The need to increase the skills of existing staff working in flood risk management.
- The need to provide appropriate education to enable new staff to have a grounding in flood risk management skills to deliver an increase in resource overall.
- The use of other initiatives to help local flood risk management, including tools, information availability, networking, and sharing best practice.

4 Further information

First Steps Towards Sustainability. A Sustainable Development Strategy for Northern Ireland. Office of the First Minister and Deputy First Minister, Feb. 2008.

<http://www.ofmdfmi.gov.uk/sustain-develop.pdf> (the precautionary approach is set out on page 113)

UK Climate Projections 09 – Key Findings and Maps for Northern Ireland. UKCIP, 2009. <http://ukclimateprojections.defra.gov.uk/content/view/374/499/>

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<http://www.scotland.gov.uk/Publications/2010/02/03132605/0>

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<http://wales.gov.uk/topics/planning/policy/tans/tan15/?skip=1&lang=en>

Facing Up to Rising Sea-Levels: Retreat? Defend? Attack? Institute of Chartered Engineers (ICE) and Building Futures, 2010.
http://www.buildingfutures.org.uk/assets/downloads/Facing_Up_To_Rising_Sea_Levels.pdf

The Pitt Review: Learning Lessons from the 2007 Floods. Pitt Review, 2008.
http://archive.cabinetoffice.gov.uk/pittreview/thepittreview/final_report.html

Adapting Institutions to Climate Change. Royal Commission on Environmental Pollution, Mar. 2010.
<http://www.rcep.org.uk/reports/28-adaptation/28-adaptation.htm>

Draft Strategy for Skills and Capacity Building in Local Authorities for Local Flood Risk Management. Department for Environment, Food and Rural Affairs, Jul. 2010.
<http://www.defra.gov.uk/environment/flooding/documents/manage/surfacewater/capacitybuilding.pdf>



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- **...through planning**

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