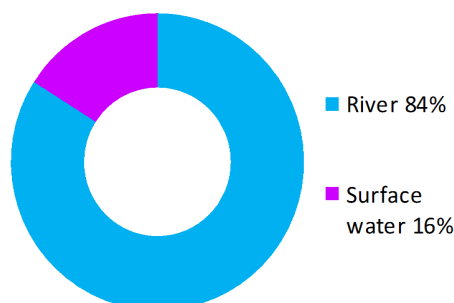


Huntly (Potentially Vulnerable Area 06/10)

Local Plan District	Local authority	Main catchment
North East	Aberdeenshire Council	River Deveron

Summary of flooding impacts



At risk of flooding

- 110 residential properties
- 50 non-residential properties
- £450,000 Annual Average Damages

(damages by flood source shown left)

Summary of flooding impacts

Summary of objectives to manage flooding

Objectives have been set by SEPA and agreed with flood risk management authorities. These are the aims for managing local flood risk. The objectives have been grouped in three main ways: by reducing risk, avoiding increasing risk or accepting risk by maintaining current levels of management.

Many organisations, such as Scottish Water and energy companies, actively maintain and manage their own assets including their risk from flooding. Where known, these actions are described here. Scottish Natural Heritage and Historic Environment Scotland work with site owners to manage flooding where appropriate at designated environmental and/or cultural heritage sites. These actions are not detailed further in the Flood Risk Management Strategies.

Objectives

Summary of actions to manage flooding

The actions below have been selected to manage flood risk.

Flood protection scheme/works	Natural flood management works	New flood warning	Community flood action groups	Property level protection scheme	Site protection plans
Flood protection study	Natural flood management study	Maintain flood warning	Awareness raising	Surface water plan/study	Emergency plans/response
Maintain flood protection scheme	Strategic mapping and modelling	Flood forecasting	Self help	Maintenance	Planning policies

Actions

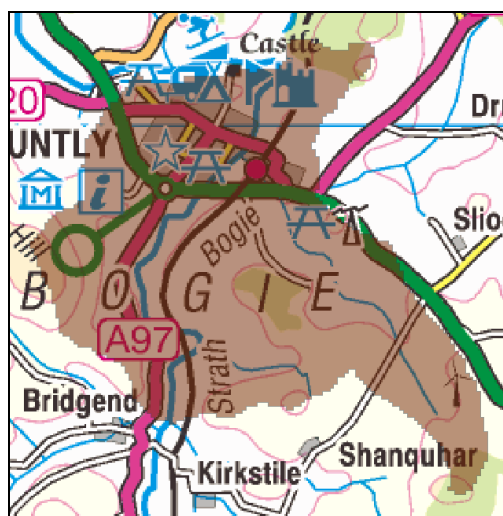
Huntly (Potentially Vulnerable Area 06/10)

Local Plan District	Local authority	Main catchment
North East	Aberdeenshire Council	River Deveron

Background

This Potentially Vulnerable Area includes Huntly and the rural area to the south. It is approximately 20km².

The A96, A97 and A920 pass through the area.



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The River Deveron and the River Bogie are the main rivers in this area.

There are approximately 110 residential and 50 non-residential properties at risk of flooding.

The Annual Average Damages are approximately £450,000 with the majority due to river flooding.

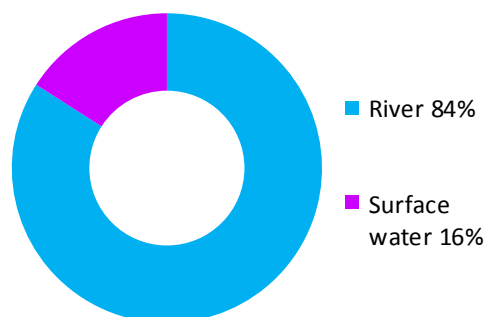


Figure 1: Annual Average Damages by flood source

Summary of flooding impacts

River flood risk is primarily focused on the Meadows area in the north of Huntly. This coincides with the floodplain of the Deveron and the Meadow Burn. There are localised areas of surface water flood risk throughout Huntly.

The risk of flooding to people and property, as well as to community facilities, utilities, the transport network, designated sites and agricultural land is summarised in Table 1.

A nursing home, roads including the A96 A97 and A920, and the Aberdeen to Inverness railway line are at risk of flooding. Four designated cultural heritage sites are also at risk within this area.

The damages associated with floods of different likelihood are shown in Figure 2. For this Potentially Vulnerable Area the highest damages are to residential properties followed by damages to non-residential properties.

The location of the impacts of flooding is shown in Figure 3.

	1 in 10 High likelihood	1 in 200 Medium likelihood	1 in 1000 Low likelihood
Residential properties (total 2,400)	50	110	150
Non-residential properties (total 360)	30	50	50
People	120	250	330
Community facilities	0	<10 Healthcare facilities	<10 Healthcare facilities
Utilities assets	0	<10	<10
Transport links (excluding minor roads)	Roads at 40 locations Rail at 10 locations	Roads at 50 locations Rail at 20 locations	Roads at 50 locations Rail at 20 locations
Environmental designated areas (km ²)	0	0	0
Designated cultural heritage sites	2	4	4
Agricultural land (km ²)	0.9	1.2	1.3

Table 1: Summary of flooding impacts¹

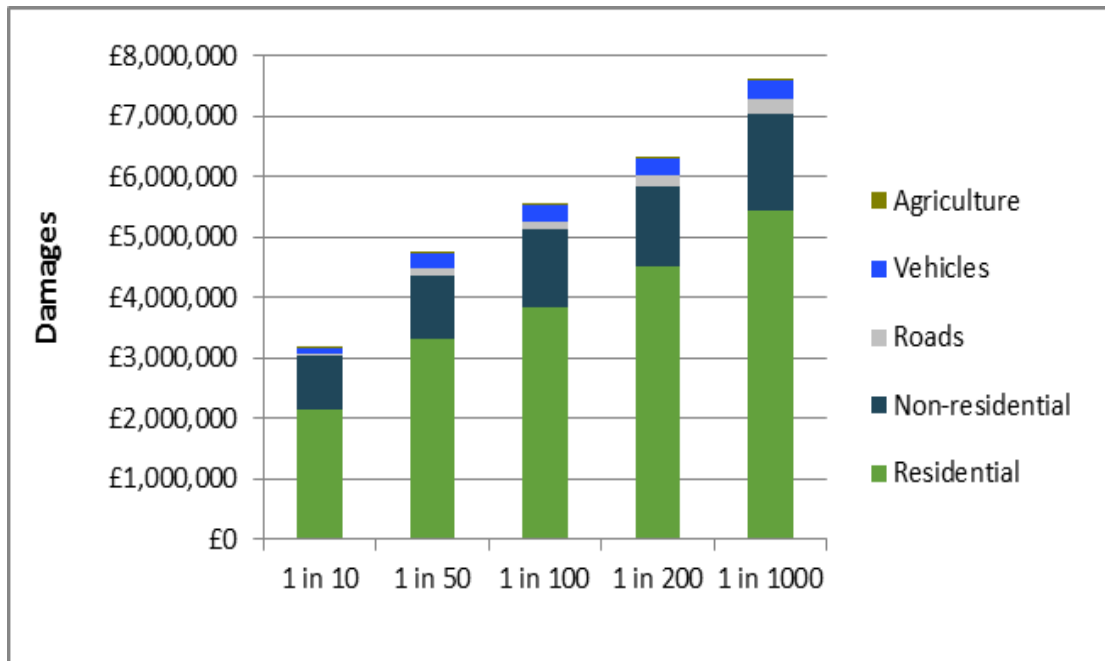


Figure 2: Damages by flood likelihood

¹ Some receptors are counted more than once if flooded from multiple sources

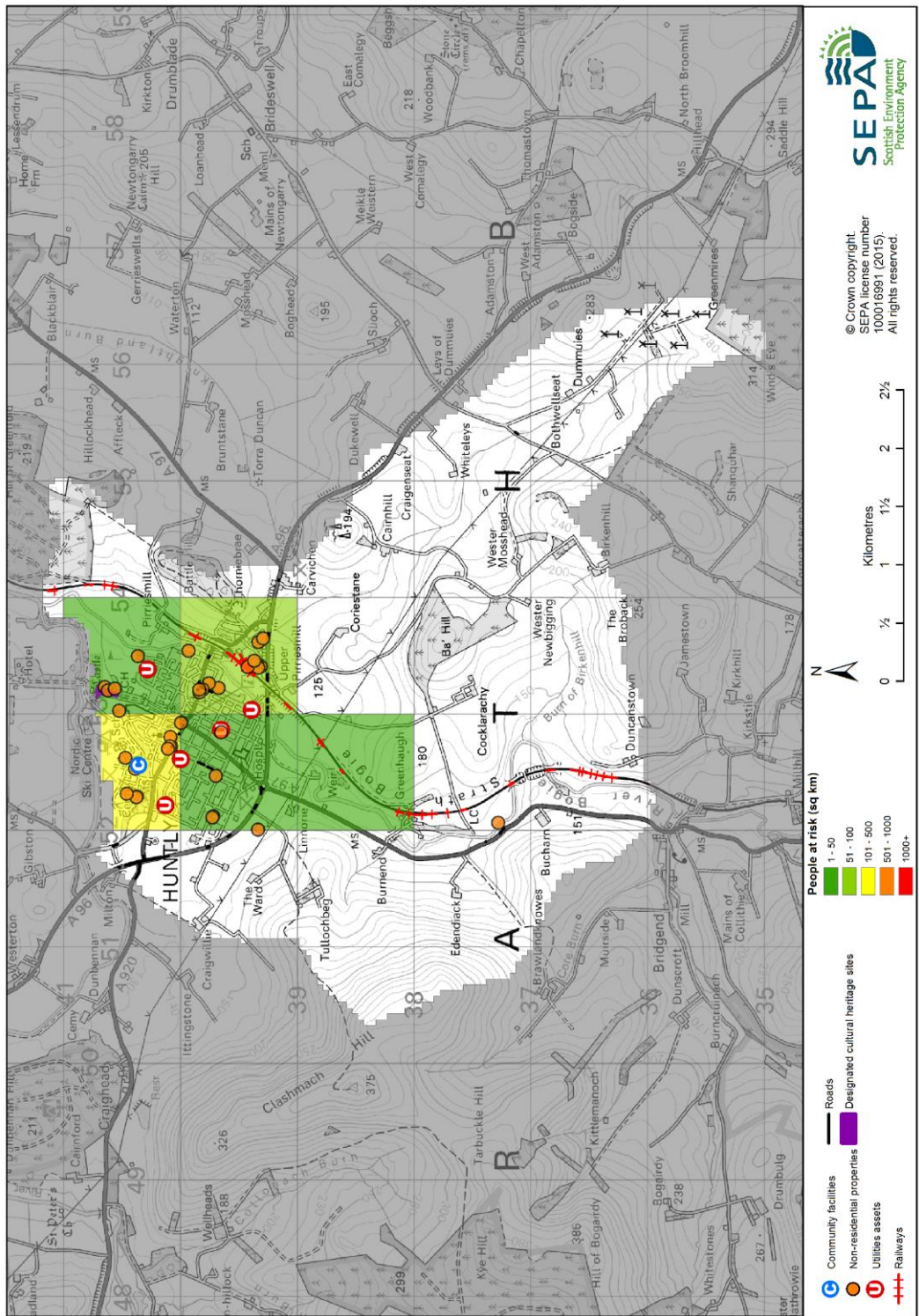


Figure 3: Impacts of flooding

History of flooding

Huntly has flooded from the River Deveron, River Bogie and Meadow Burn. Residents in the Meadows area have been evacuated on several occasions in recent years.

The earliest recorded flood was in 1829 when the town was surrounded by water and bridges destroyed by the Bogie and Deveron. There are also floods recorded from the Bogie in 1865, 1872, 1878 and 1881. The Deveron caused flooding in 1839, 1865, 1869, 1874 and 1881.

More recently, there was flooding of the Meadows area in 1995 and a further 12 floods have been recorded since 1997 from various sources including the Ittingstone Burn, Meadows Burn (2009), the Bogie (2002, 2003, 2005, and 2006) and the Deveron (2009). The highest impact flood on record occurred in November 2009 when over 100 people had to be evacuated from the Meadows area, including from a nursing home, due to flooding from the Meadows Burn.

Flooding from surface water runoff has also been recorded at various locations in Huntly. These floods have affected properties, roads, caravan parks, car parks and a care home. The areas of Huntly which have been affected include central, south east, and east Huntly, including Bleachfield Street, Burnside Road, Green Road and Glamourhaugh, George Street, and the Meadows area.

Objectives to manage flooding in Potentially Vulnerable Area 06/10

Objectives provide a common goal and shared ambition for managing floods. These objectives have been set by SEPA and agreed with flood risk management authorities following consultation. They were identified through an assessment of the underlying evidence of the causes and impacts of flooding. Target areas have been set to focus actions; they do not necessarily correspond to areas at risk in SEPA's flood map. The objectives below have been set for Huntly Potentially Vulnerable Area.

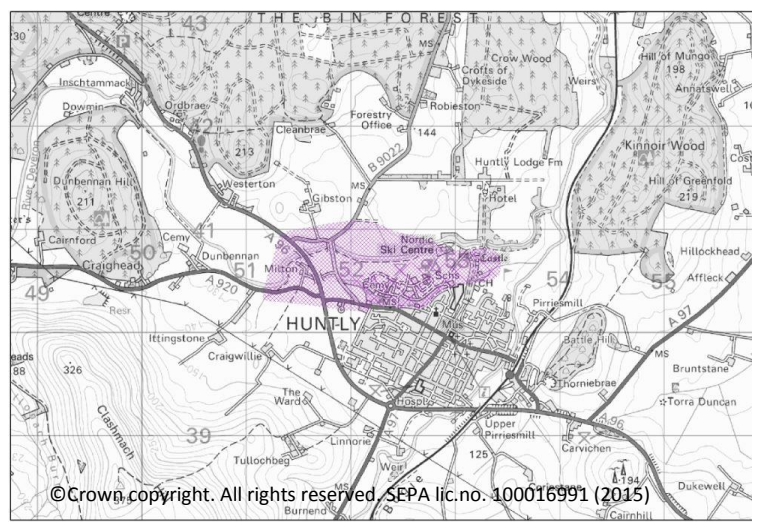
Reduce flood risk in the Meadows area of Huntly (including A96 and A920, Ski Centre and caravan park) from the River Deveron and Meadows Burn

Indicators:

Target area:

- 110 people
- £180,000 Annual Average Damages
- 1 nursing home
- A96
- A920

Objective ID: 601001



Target area	Objective	ID	Indicators within PVA
Huntly	Reduce the physical risk, or disruption risk, related to areas of the A96 at risk of flooding	6300	<ul style="list-style-type: none"> • 10 locations on the A96 with a total length of 220m
Huntly	Reduce risk from surface water flooding in Huntly	601004	* See note below
Applies across North East Local Plan District	Avoid an overall increase in flood risk	600001	<ul style="list-style-type: none"> • 110 residential properties • £450,000 Annual Average Damages
Applies across North East Local Plan District	Reduce overall flood risk	600002	<ul style="list-style-type: none"> • 110 residential properties • £450,000 Annual Average Damages
Applies across North East Local Plan District	Organisations such as Scottish Water, energy companies and Historic Environment Scotland actively maintain and manage their own assets, including the risk of flooding. These actions are not detailed further in the Flood Risk Management Strategies.		

* This objective will be monitored using surface water flood risk across the Potentially Vulnerable Area. For 06/10 there are 60 residential properties at risk and Annual Average Damages of £72,000.

Actions to manage flooding in Potentially Vulnerable Area 06/10

Actions describe where and how flood risk will be managed. These actions have been set by SEPA and agreed with flood risk management authorities following consultation. Selection of actions to deliver the agreed objectives was based on a detailed assessment and comparison of economic, social and environmental criteria. The actions shaded and then described below have been selected as the most appropriate for Huntly Potentially Vulnerable Area.

Selected actions					
Flood protection scheme/works	Natural flood management works	New flood warning	Community flood action groups	Property level protection scheme	Site protection plans
Flood protection study	Natural flood management study	Maintain flood warning	Awareness raising	Surface water plan/study	Emergency plans/response
Maintain flood protection scheme	Strategic mapping and modelling	Flood forecasting	Self help	Maintenance	Planning policies

Action (ID):	FLOOD PROTECTION SCHEME/WORKS (6010010006)				
Objective (ID):	Reduce flood risk in the Meadows area of Huntly (including A96 and A920, Ski Centre and caravan park) from the River Deveron and Meadows Burn (601001)				
Delivery lead:	Aberdeenshire Council				
Priority:	National:		Within local authority:		
	33 of 42		2 of 2		
Status:	Under development	Indicative delivery:	2016-2021		
Description:	A flood protection scheme has been confirmed and is being progressed to construction on site to reduce flood risk from the River Deveron and the Meadows Burn. The scheme includes a combination of improved conveyance using replacement culverts, construction of embankments and temporary flood water storage and has been designed to a 1 in 200 year standard of protection including an allowance for climate change.				
Potential impacts					
Economic:	The flood protection scheme will reduce flood risk to 50 residential properties and 13 non-residential properties, with estimated damages avoided of £3.4 million. The benefit cost ratio of the proposed works is 1.1.				
Social:	The flood protection scheme will reduce risk to an estimated 110 people. A reduction in flood risk would have a positive benefit to the health and wellbeing of the community and socially vulnerable people. There are a higher than average number of vulnerable people in the area who will benefit from the works. The nursing home, A96 and A920, ski centre and caravan park would also benefit from reduced flood risk.				

Environmental:	Flood protection works can have both positive and negative impacts on the ecological quality of the environment depending on how they are designed. In Huntly, the embankments are set back from the river and are likely to improve the ecological quality. One scheduled monument would benefit from reduced risk of flooding. Actions taken to minimise the impacts to the environment include use of shallow sloping defences to reduce the visual impacts. There are no designated habitat sites close to the area.
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Action (ID):	FLOOD PROTECTION SCHEME/WORKS (6300021)		
Objective (ID):	Reduce the physical risk, or disruption risk, related to areas of the A96 at risk of flooding (6300)		
Delivery lead:	Transport Scotland		
Status:	Not started	Indicative delivery:	2028-2033
Description:	Transport Scotland will carry out civil engineering work which will reduce flood risk to identified sections of the A96.		

Action (ID):	SURFACE WATER PLAN/STUDY (6010040018)		
Objective (ID):	Reduce risk from surface water flooding in Huntly (601004)		
Delivery lead:	Aberdeenshire Council		
Status:	Ongoing	Indicative delivery:	2016-2021
Description:	The area must be covered by a surface water management plan or plans that set objectives for the management of surface water flood risk and identify the most sustainable actions to achieve the objectives.		

Action (ID):	STRATEGIC MAPPING AND MODELLING (6000020019)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	Scottish Water		
Status:	Not started	Indicative delivery:	2016-2021
Description:	Scottish Water will carry out an assessment of flood risk within the highest risk sewer catchments to improve knowledge and understanding of surface water flood risk.		

Action (ID):	MAINTAIN FLOOD WARNING (6000020030)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	SEPA		
Status:	Existing	Indicative delivery:	Ongoing
Description:	Continue to maintain the 'Huntly (Bogie)' flood warning area which is on the River Bogie and the 'Milton and The Meadows' flood warning area. Both form part of the Deveron river flood warning scheme.		

Action (ID):	FLOOD FORECASTING (6000020009)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	SEPA		
Status:	Existing	Indicative delivery:	Ongoing
Description:	<p>The Scottish Flood Forecasting Service is a joint initiative between SEPA and the Met Office that produces daily, national flood guidance statements which are issued to Category 1 and 2 Responders. The service also provides information which allows SEPA to issue flood warnings, giving people a better chance of reducing the impact of flooding on their home or business. For more information please visit SEPA's website.</p> <p>The Potentially Vulnerable Area is within the 'Aberdeenshire and Aberdeen City' flood alert area.</p>		

Action (ID):	SELF HELP (6000020011)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	—		
Status:	Existing	Indicative delivery:	Ongoing
Description:	<p>Everyone is responsible for protecting themselves and their property from flooding. Property and business owners can take simple steps to reduce damage and disruption to their homes and businesses should flooding happen. This includes preparing a flood plan and flood kit, installing property level protection, signing up to Floodline and Resilient Communities initiatives, and ensuring that properties and businesses are insured against flood damage.</p> <p>Aberdeenshire Council provide a small range of flood protection products for individual property protection, which are available for all types of flooding, at cost price with free delivery across Aberdeenshire.</p>		

Action (ID):	AWARENESS RAISING (6000020013)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	Responsible authorities		
Status:	Existing	Indicative delivery:	Ongoing
Description:	<p>SEPA and the responsible authorities have a duty to raise public awareness of flood risk. Improved awareness of flood risk and actions that prepare individuals, homes and businesses for flooding can reduce the overall impact.</p> <p>From 2016 SEPA will engage with the community and promote Floodline. This will be achieved through property level protection events delivered by the Scottish Flood Forum and SEPA led education events.</p> <p>Local authorities will be undertaking additional awareness raising activities. Further details will be set out in the Local FRM Plan.</p>		

Action (ID):	MAINTENANCE (6000020007)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	Aberdeenshire Council, asset / land managers		
Status:	Existing	Indicative delivery:	Ongoing
Description:	<p>Local authorities have a duty to assess watercourses and carry out clearance and repair works where such works would substantially reduce flood risk. They produce schedules of clearance and repair works and make these available for public inspection. Scottish Water undertake inspection and repair on the public sewer network. Asset owners and riparian landowners are responsible for the maintenance and management of their own assets including those which help to reduce flood risk.</p>		

Action (ID):	EMERGENCY PLANS/RESPONSE (6000020014)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	Category 1 and 2 Responders		
Status:	Existing	Indicative delivery:	Ongoing
Description:	<p>Providing an emergency response to flooding is the responsibility of many organisations, including local authorities, the emergency services and SEPA. Effective management of an emergency response relies on emergency plans that are prepared under the Civil Contingencies Act 2004 by Category 1 and 2 Responders. The emergency response by these organisations is co-ordinated through regional and local resilience partnerships. This response may be supported by the work of voluntary organisations.</p> <p>There are two containers of sand bags, which can be accessed by members of the community for deployment in the event of a flood warning, within the Meadows area in Huntly. Aberdeenshire Council also operates a flood monitor on the Meadows Burn to provide early warning of potential flooding.</p>		

Action (ID):	PLANNING POLICIES (6000010001)		
Objective (ID):	Avoid an overall increase in flood risk (600001) Reduce overall flood risk (600002)		
Delivery lead:	Planning authority		
Status:	Existing	Indicative delivery:	Ongoing
Description:	<p>Scottish Planning Policy and accompanying Planning Advice Notes set out Scottish Ministers' priorities for the operation of the planning system and for the development and use of land. In terms of flood risk management, the policy supports a catchment-scale approach to sustainable flood risk management and aims to build the resilience of our cities and towns, encourage sustainable land management in our rural areas, and to address the long-term vulnerability of parts of our coasts and islands. Under this approach, new development in areas with medium to high likelihood of flooding should be avoided. For further information on the application of national planning policies see Annex 2.</p>		