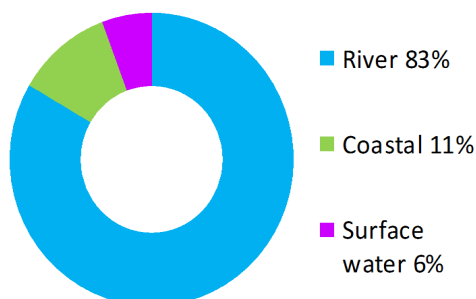


Oban (Potentially Vulnerable Area 01/31)

Local Plan District	Local authority	Main catchment
Highland and Argyll	Argyll and Bute Council	Knapdale coastal

Summary of flooding impacts



At risk of flooding

- 320 residential properties
- 310 non-residential properties
- £1.8 million 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.

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

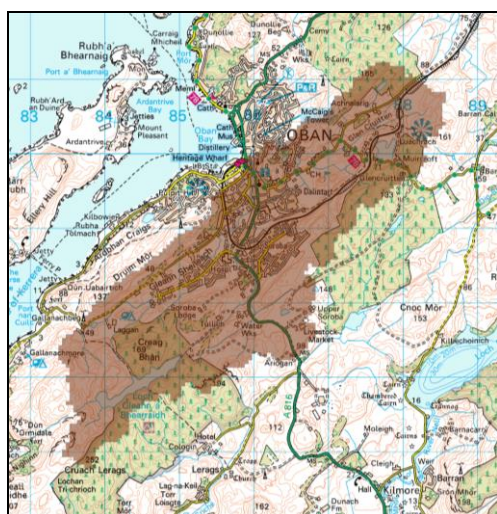
Actions

Oban (Potentially Vulnerable Area 01/31)

Local Plan District	Local authority	Main catchment
Highland and Argyll	Argyll and Bute Council	Knapdale coastal

Background

This Potentially Vulnerable Area includes Oban and the mainly rural area to the south (shown below). It is approximately 11km². The A816 runs through the area.



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The main river in Oban is the Black Lynn Burn.

There are approximately 320 residential and 310 non-residential properties at risk of flooding.

The Annual Average Damages are approximately £1.8million with the majority due to river flooding.

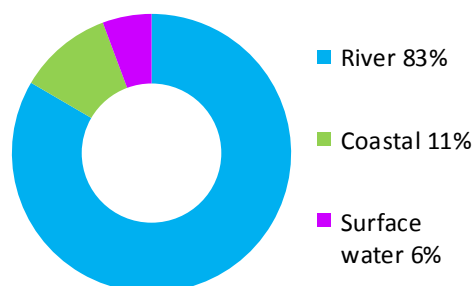


Figure 1: Annual Average Damages by flood source

Summary of flooding impacts

Flood risk in Oban is from the Black Lynn Burn, including its tidal section. There is also coastal flood risk along the sea front, which is exacerbated by wave overtopping.

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.

Roads potentially affected include the A816, which is the main route south linking Oban with the rest of southern Argyll. The Oban to Glasgow railway has a risk of being flooding in several locations.

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

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

	1 in 10	1 in 200	1 in 1000
	High likelihood	Medium likelihood	Low likelihood
Residential properties (total 2,200)	40	320	400
Non-residential properties (total 820)	70	310	440
People	80	690	880
Community facilities	0	0	0
Utilities assets	<10	10	10
Transport links (excluding minor roads)	Roads at 40 locations Rail at <10 locations	Roads at 70 locations Rail at <10 locations	Roads at 80 locations Rail at <10 locations
Environmental designated areas (km ²)	0	0	0
Designated cultural heritage sites	0	0	0
Agricultural land (km ²)	<0.1	<0.1	<0.1

Table 1: Summary of flooding impacts¹

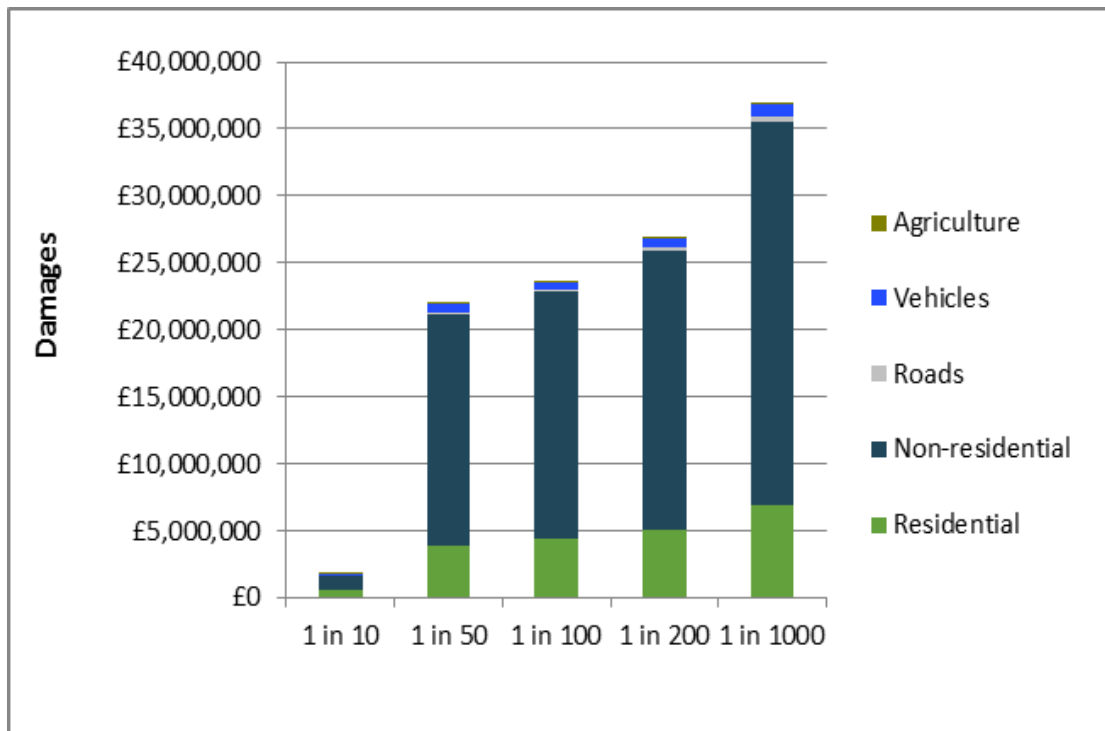


Figure 2: Damages by flood likelihood

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

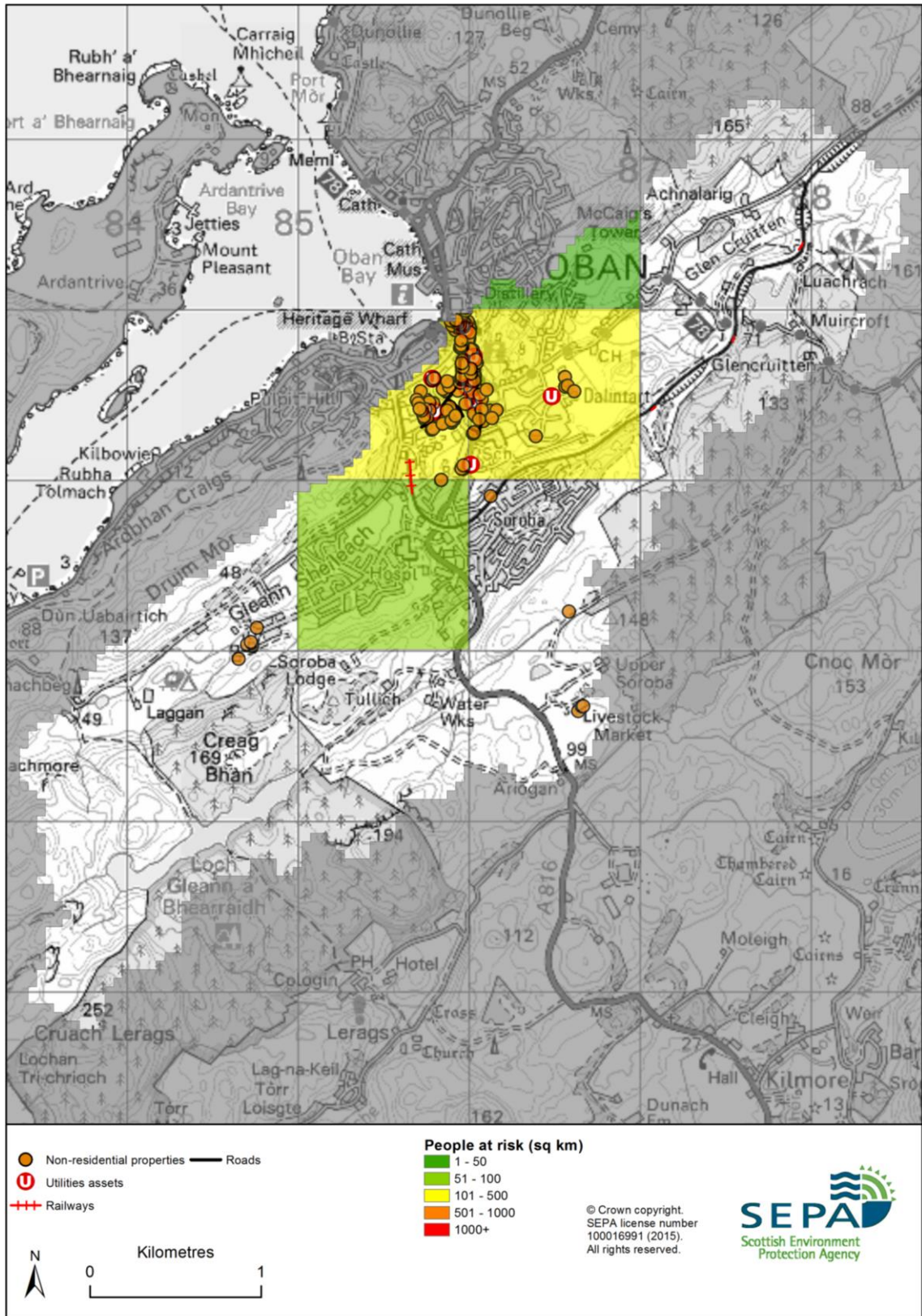


Figure 3: Impacts of flooding

History of flooding

The earliest recorded flood was in 1869 when coastal flooding inundated properties to a depth of 2-3 feet and damaged roads, the sea wall and the pier.

Flooding was reported in 2006, and in 2005 the town was severely affected requiring the deployment of over 3,000 sandbags.

Floods at Dalintart and Lochavulin have been reported, affecting car parks, roads, and property. In 2013 there was a coastal flood that affected at least one non-residential property on the landward side of the A85.

Objectives to manage flooding in Potentially Vulnerable Area 01/31

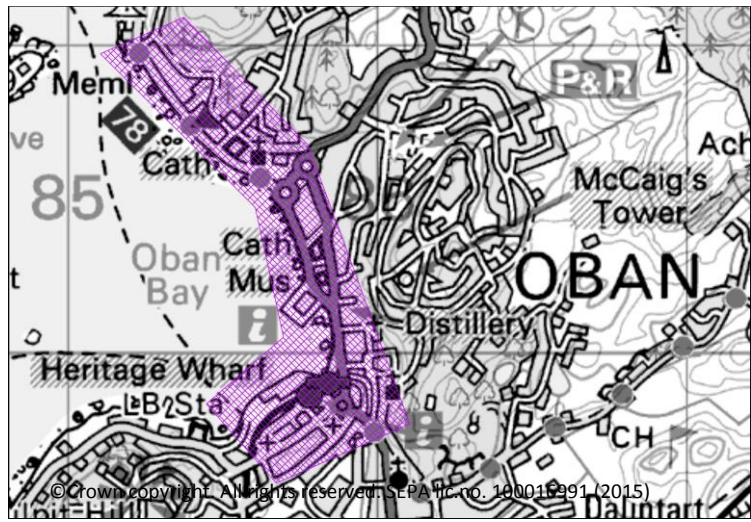
Objectives provide a common goal and shared ambition for managing floods. These objectives have been set by SEPA and agreed with flood risk management authorities following consultation. They were identified through an assessment of the underlying evidence of the causes and impacts of flooding. Target 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 Oban Potentially Vulnerable Area.

Reduce risk along the Oban Bay frontage from coastal flooding

Indicators:

- £2,700 Annual Average Damages from residential properties
- £17,000 Annual Average Damages from non-residential properties

Target area:



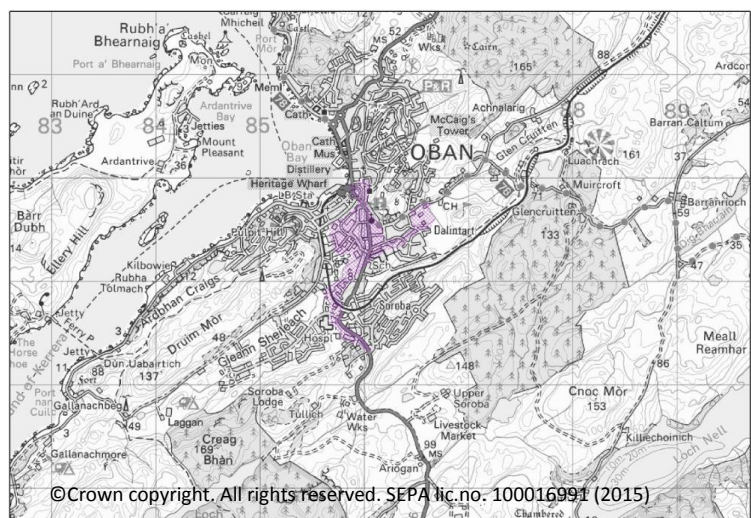
Objective ID: 103101

Reduce river and coastal flooding in Oban from the Black Lynn Burn

Indicators:

- 650 people
- £280,000 Annual Average Damages from residential properties
- £1.2 million Annual Average Damages from non-residential properties

Target area:



Objective ID: 103102

Target area	Objective	ID	Indicators within PVA
Oban	Reduce risk from surface water flooding in Oban	103106	* See note below
Applies across Highland and Argyll Local Plan District	Avoid an overall increase in flood risk	100001	<ul style="list-style-type: none"> • 320 residential properties • £1.8 million Annual Average Damages
Applies across Highland and Argyll Local Plan District	Reduce overall flood risk	100002	<ul style="list-style-type: none"> • 320 residential properties • £1.8 million Annual Average Damages
Applies across Highland and Argyll 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 01/31 there are 20 residential properties at risk and Annual Average Damages of £100,000.

Actions to manage flooding in Potentially Vulnerable Area 01/31

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 Oban Potentially Vulnerable Area.

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

Action (ID):	FLOOD PROTECTION STUDY (1031020005)		
Objective (ID):	Reduce river and coastal flooding in Oban from the Black Lynn Burn (103102) Reduce risk along the Oban Bay frontage from coastal flooding (103101)		
Delivery lead:	Argyll and Bute Council		
Priority:	National: 5 of 168	Within local authority: 1 of 9	
Status:	Not started	Indicative delivery:	2016-2021
Description:	A study is recommended to assess flood risk from the Black Lynn Burn, including tidal effects in the Black Lynn Burn and coastal flooding in Oban Bay. The study should focus on direct defences, natural flood management (including flood storage, runoff control, sediment management), increasing storage on the existing lochs (Loch Gleann a Bhearraidh and Luachrach Loch), property level protection and individual property relocation for residual risk. Other actions may also be considered to develop the most sustainable flood risk management options.		
Potential impacts			
Economic:	The study could benefit 297 residential and 260 non-residential properties at risk of flooding in this location, with potential damages avoided of up to £46 million.		
Social:	Approximately 653 people may directly benefit from flood protection works. Oban has a higher than average proportion of vulnerable residents. A reduction in flood risk would have a positive benefit to the health and wellbeing of the community and socially vulnerable people. Reduced flood risk to major transport links including the		

Social:	A816, Oban to Glasgow railway line, eight energy production/electricity utility sites and a telecommunications site would benefit the wider community. Natural flood management actions can restore and enhance natural environments and create opportunities for recreation and tourism. Negative impacts through disturbance to the local community during the construction phase should be considered.
Environmental:	Flood protection studies should consider the positive and negative impacts of proposed actions on the ecological quality of the environment. Natural flood management actions can have a positive impact by restoring and enhancing natural habitats. Opportunities to mitigate any environmental impacts may include design and timing of works. There is potential for impacts on habitats and channel morphology, however the Black Lynn Burn is already heavily modified and channelized, and therefore impacts are likely to be limited. There is potential for creating new habitats through new flood storage areas. There are no nearby environmentally designated sites which could be impacted by flood protection works.

Action (ID):	SURFACE WATER PLAN/STUDY (1031060018)		
Objective (ID):	Reduce risk from surface water flooding in Oban (103106)		
Delivery lead:	Argyll and Bute 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 (1000020019)		
Objective (ID):	Reduce overall flood risk (100002)		
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 (1000020030)		
Objective (ID):	Reduce overall flood risk (100002)		
Delivery lead:	SEPA		
Status:	Existing	Indicative delivery:	Ongoing
Description:	Continue to maintain the 'Oban' coastal flood warning area which is part of the Firth of Lorn and Loch Linnhe coastal flood warning scheme.		

Action (ID):	FLOOD FORECASTING (1000020009)		
Objective (ID):	Reduce overall flood risk (100002)		
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 'Argyll and Bute' flood alert area.</p>		

Action (ID):	SELF HELP (1000020011)		
Objective (ID):	Reduce overall flood risk (100002)		
Delivery lead:	—		
Status:	Existing	Indicative delivery:	Ongoing
Description:	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.		

Action (ID):	AWARENESS RAISING (1000020013)		
Objective (ID):	Reduce overall flood risk (100002)		
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 communities and promote Floodline using most the appropriate mix of methods for the area. These could include direct mailings, education activities, participation in local events and relevant flooding messages in the media. Local authorities will be undertaking additional awareness raising activities. Further details will be set out in the Local FRM Plan.</p>		

Action (ID):	MAINTENANCE (1000020007)		
Objective (ID):	Reduce overall flood risk (100002)		
Delivery lead:	Argyll and Bute 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 (1000020014)		
Objective (ID):	Reduce overall flood risk (100002)		
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>		

Action (ID):	PLANNING POLICIES (1000010001)		
Objective (ID):	Avoid an overall increase in flood risk (100001) Reduce overall flood risk (100002)		
Delivery lead:	Planning authority		
Status:	Existing	Indicative delivery:	Ongoing
Description:	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.		