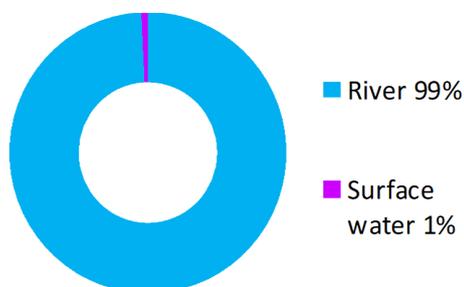


Ballater (Potentially Vulnerable Area 06/22)

Local Plan District	Local authority	Main catchment
North East	Aberdeenshire Council	River Dee (Grampian)

Summary of flooding impacts



At risk of flooding

- 200 residential properties
- 40 non-residential properties
- £230,000 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

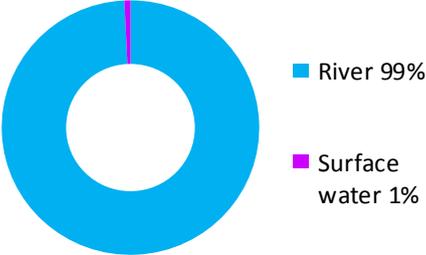
The actions below have been selected to manage flood risk.

<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	<i>Surface water plan/study</i>	Emergency plans/response
<i>Maintain flood protection scheme</i>	Strategic mapping and modelling	Flood forecasting	Self help	Maintenance	Planning policies

Actions

Ballater (Potentially Vulnerable Area 06/22)

Local Plan District	Local authority	Main catchment
North East	Aberdeenshire Council	River Dee (Grampian)

Background	
<p>This Potentially Vulnerable Area is based around Ballater and is approximately 7km².</p> <p>The area is located within the Cairngorms National Park and the A93 passes through it.</p>  <p><small>© Crown copyright. SEPA licence number 100016991 (2015). All rights reserved.</small></p>	<p>The main river is the River Dee, which is a Special Area of Conservation for salmon, otters and freshwater pearl mussels.</p> <p>There are approximately 200 residential and 40 non-residential properties at risk of flooding.</p> <p>The Annual Average Damages are approximately £230,000. Almost all the damages are caused by river flooding.</p>  <p>Figure 1: Annual Average Damages by flood source</p>

Summary of flooding impacts

The main areas at risk of river flooding are along the River Dee in south and east Ballater around Salisbury Road, Braichlie Road and Dee Street. Further areas of risk include Tullich Road and Craigview Road.

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.

The caravan site and the fire station are at risk of flooding as are a number of roads, notably the A93, B972 and B976. Small areas of designated environmental sites are also at risk of flooding including the River Dee Special Area of Conservation.

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 960)	<10	200	540
Non-residential properties (total 190)	<10	40	100
People	<10	430	1,200
Community facilities	0	<10 Emergency services	<10 Emergency services
Utilities assets	0	<10	<10
Transport links (excluding minor roads)	Roads at <10 locations	Roads at <10 locations	Roads at 10 locations
Environmental designated areas (km ²)	0.3	0.4	0.4
Designated cultural heritage sites	0	0	0
Agricultural land (km ²)	0.1	0.6	0.8

Table 1: Summary of flooding impacts¹

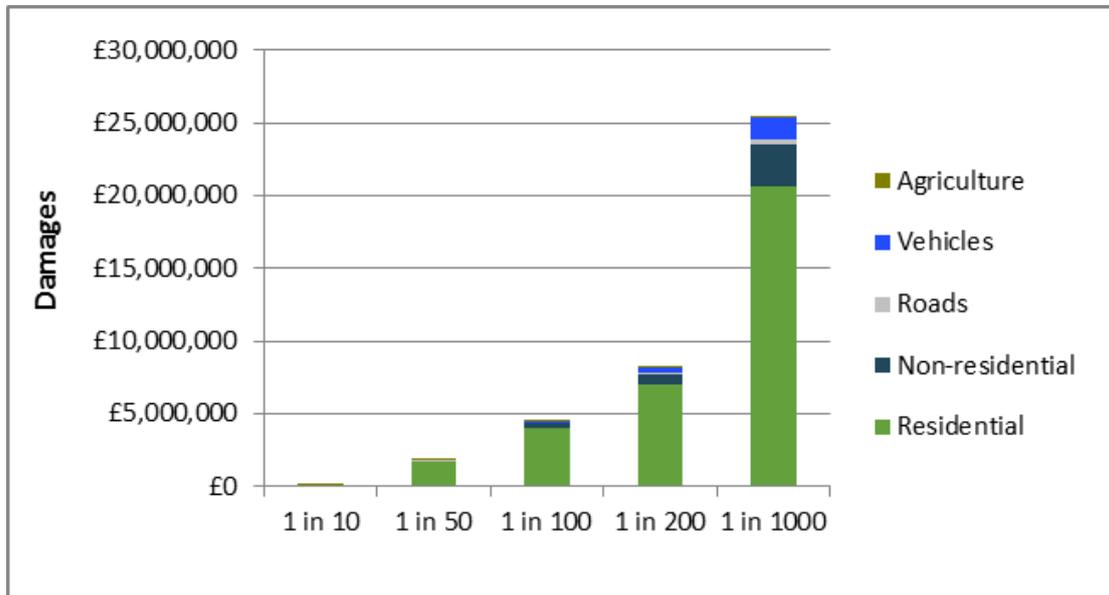


Figure 2: Damages by flood likelihood

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

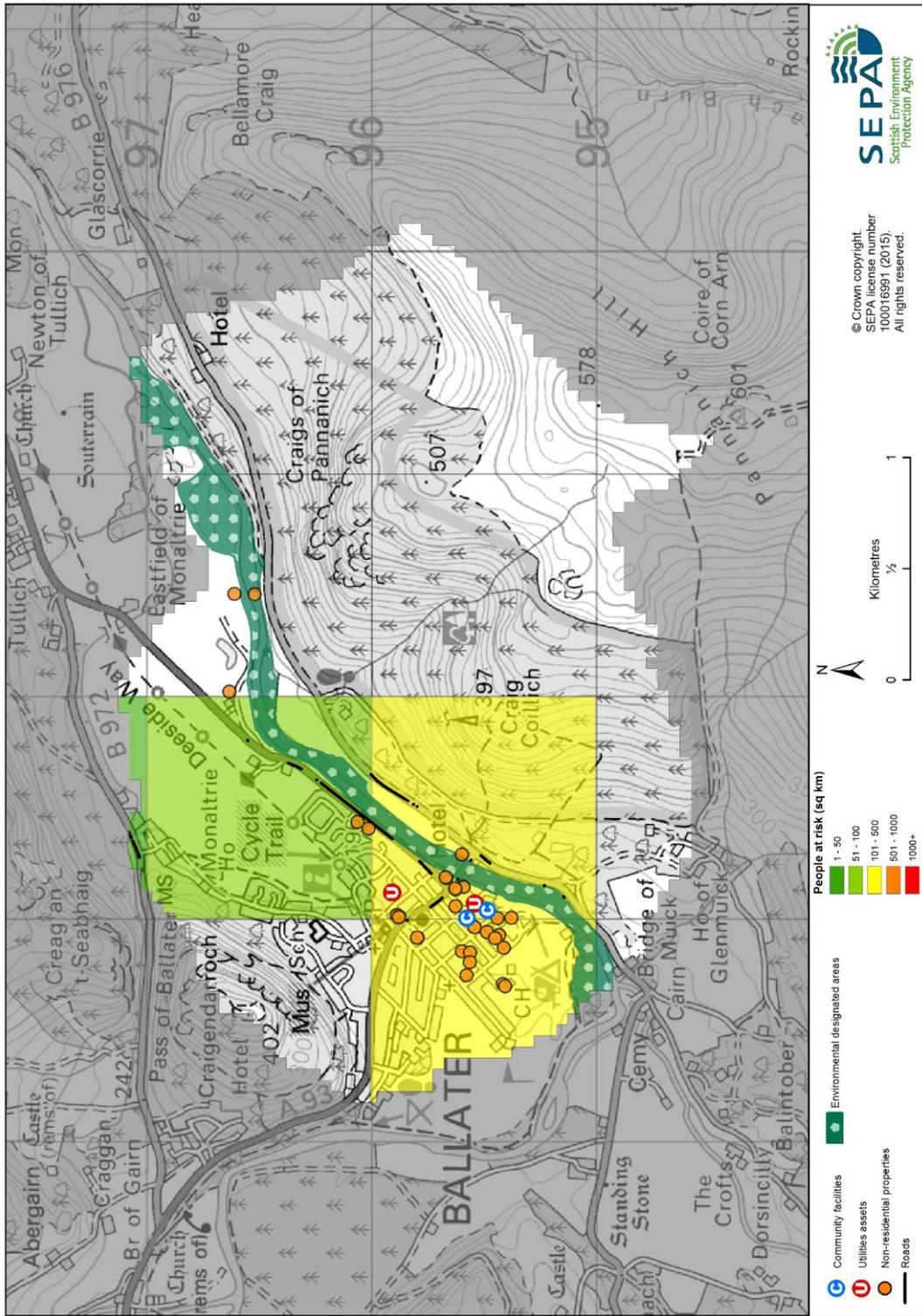


Figure 3: Impacts of flooding

History of flooding

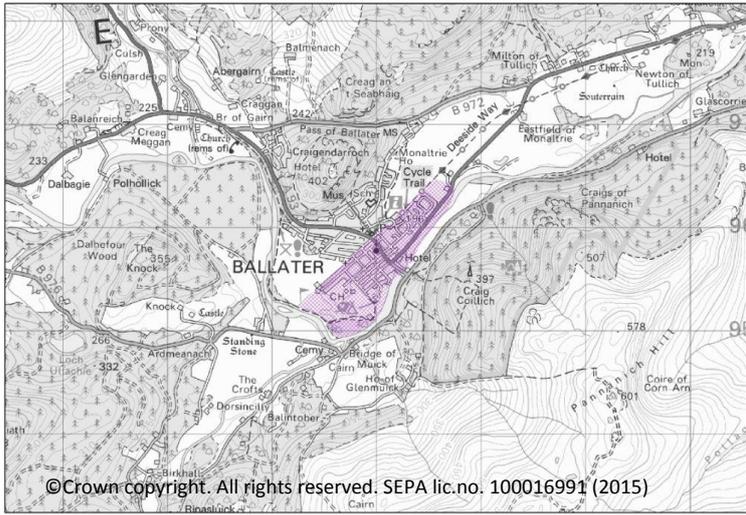
Flooding occurred on the River Dee in 1829, destroying the Ballater Bridge and in 1839, the bridge at Tullich was damaged. In 1877, cellars in the lower part of Ballater were flooded, and in 1920 and 1929 the town and roads were flooded.

Local reports are that in the late 1980s the bottom part of the village was badly flooded with water coming up through the drains. Deebank Road, Bridge Street, Richmond Place, Braichlie Road were all affected. In 2008, surface runoff entered the Netherley Guest House at Netherley Place.

In August 2014, the caravan park and a number of roads were closed due to flooding from the River Dee. As a result, 150 people were evacuated from the caravan site.

Objectives to manage flooding in Potentially Vulnerable Area 06/22

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 Ballater Potentially Vulnerable Area.

Reduce flood risk in Ballater from the River Dee	
Indicators:	Target area:
<ul style="list-style-type: none"> 420 people £170,000 Annual Average Damages from residential properties £16,000 Annual Average Damages from non-residential properties 2 emergency services 	 <p style="font-size: small; text-align: center;">©Crown copyright. All rights reserved. SEPA lic.no. 100016991 (2015)</p>
Objective ID: 602201	

Target area	Objective	ID	Indicators within PVA
Applies across North East Local Plan District	Avoid an overall increase in flood risk	600001	<ul style="list-style-type: none"> 200 residential properties £230,000 Annual Average Damages
Applies across North East Local Plan District	Reduce overall flood risk	600002	<ul style="list-style-type: none"> 200 residential properties £230,000 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.		

Actions to manage flooding in Potentially Vulnerable Area 06/22

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 Ballater Potentially Vulnerable Area.

Selected actions					
<i>Flood protection scheme/works</i>	<i>Natural flood management works</i>	<i>New flood warning</i>	Community flood action groups	<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	<i>Surface water plan/study</i>	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 (6022010005)		
Objective (ID):	Reduce flood risk in Ballater from the River Dee (602201)		
Delivery lead:	Aberdeenshire Council		
Priority:	National:		Within local authority:
	90 of 168		5 of 12
Status:	Not started	Indicative delivery:	2022-2027
Description:	A flood protection study is required to consider flood protection works to reduce the risk of flooding in Ballater from the River Dee. The flood protection study should primarily focus on direct defences, relocation of properties and property level protection, but other actions may also be considered in order to develop the most sustainable range of options.		
Potential impacts			
Economic:	The study could benefit 192 residential and 32 non-residential properties at risk of flooding in this location, with potential damages avoided of up to £3.8 million.		
Social:	The development of flood protection works following the study would potentially reduce risk to 422 people. A reduction in flood risk would have a positive benefit to the health and wellbeing of the community and socially vulnerable people. The caravan park, two emergency services and two utility sites (one energy/electricity site and one telecommunications site) could benefit from future flood protection works depending on the location and extent of works confirmed in the study. 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. Opportunities to mitigate any environmental impacts may include design and timing of works. The flood protection study should consider how to avoid or minimise potential impacts on the Ballater conservation area and Cairngorms National Park. To be in accord with the FRM Strategy, the responsible authority should seek to ensure as part of the study that the action will not have an adverse effect on the integrity of the River Dee Special Area of Conservation.
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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 'Ballater' flood warning area which is part of the Dee 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):	COMMUNITY FLOOD ACTION GROUPS (6000020012)		
Objective (ID):	Reduce overall flood risk (600002)		
Delivery lead:	Community		
Status:	Existing	Indicative delivery:	Ongoing
Description:	There is a flood action group in Ballater.		

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 through local participation in national initiatives, including partnership working with Neighbourhood Watch Scotland. In addition, SEPA will engage with local authorities and community resilience groups where possible. 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:	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.		

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:	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.		

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:	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.		