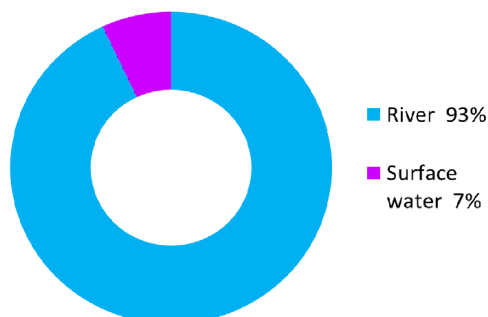


Newcastleton (Potentially Vulnerable Area 14/03)

Local Plan District	Local authority	Main catchment
Solway	Scottish Borders Council	River Esk (Solway)

Summary of flooding impacts



At risk of flooding

- 140 residential properties
- 10 non-residential properties
- £160,000 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>	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	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

Newcastleton (Potentially Vulnerable Area 14/03)

Local Plan District	Local authority	Main catchment
Solway	Scottish Borders Council	River Esk (Solway)

Background

This Potentially Vulnerable Area is located in the east of the Solway Local Plan District. It is almost 10km² and incorporates the town of Newcastleton (shown below).



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There are approximately 140 residential properties and 10 non-residential properties at risk of flooding.

The Annual Average Damages are £160,000 with the majority caused by river flooding.

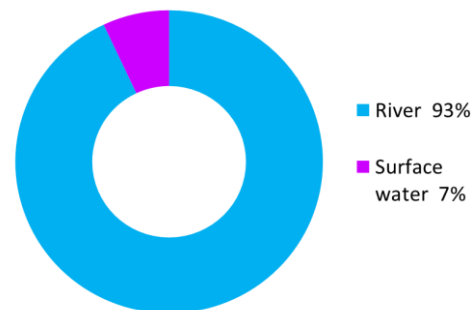


Figure 1: Annual Average Damages by flood source

Summary of flood impacts

River flooding within this Potentially Vulnerable Area is primarily caused by the Liddel Water with the main impacts in the centre of Newcastleton. At this location both residential and non-residential properties are at risk of flooding. River flooding to the north and south of the village could directly impact upon the B6357 and areas of agricultural land.

There are approximately 10 residential properties at risk of surface water flooding. However, previous flooding in the area has shown a greater flood risk because surface water and river flooding could combine. The areas at highest risk from surface water flooding will require the preparation of surface water management plans.

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. Most of the receptors at risk of flooding lie within Newcastleton and include people, non-residential properties and roads.

Within this Potentially Vulnerable Area it is estimated that climate change will increase the number of residential properties at risk of flooding from approximately 140 to 370 and the number of non-residential properties from approximately 10 to 40.

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. 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 440)	20	140	260
Non-residential properties (total 40)	<10	10	20
People	40	300	560
Community facilities	0	0	0
Utilities assets	0	0	<10
Transport links – roads (km)	0.2	0.8	1.1
Environmental designated areas (km ²)	0	0	0
Designated cultural heritage sites	0	0	0
Agricultural land (km ²)	0.2	0.3	0.3

Table 1: Summary of flood impacts¹

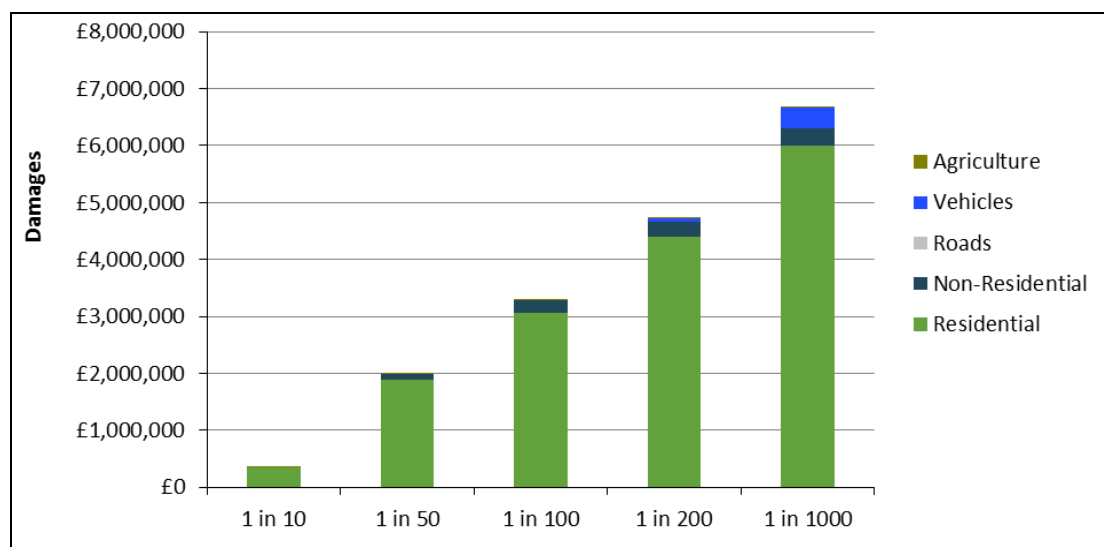


Figure 2: Damages by flood likelihood

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

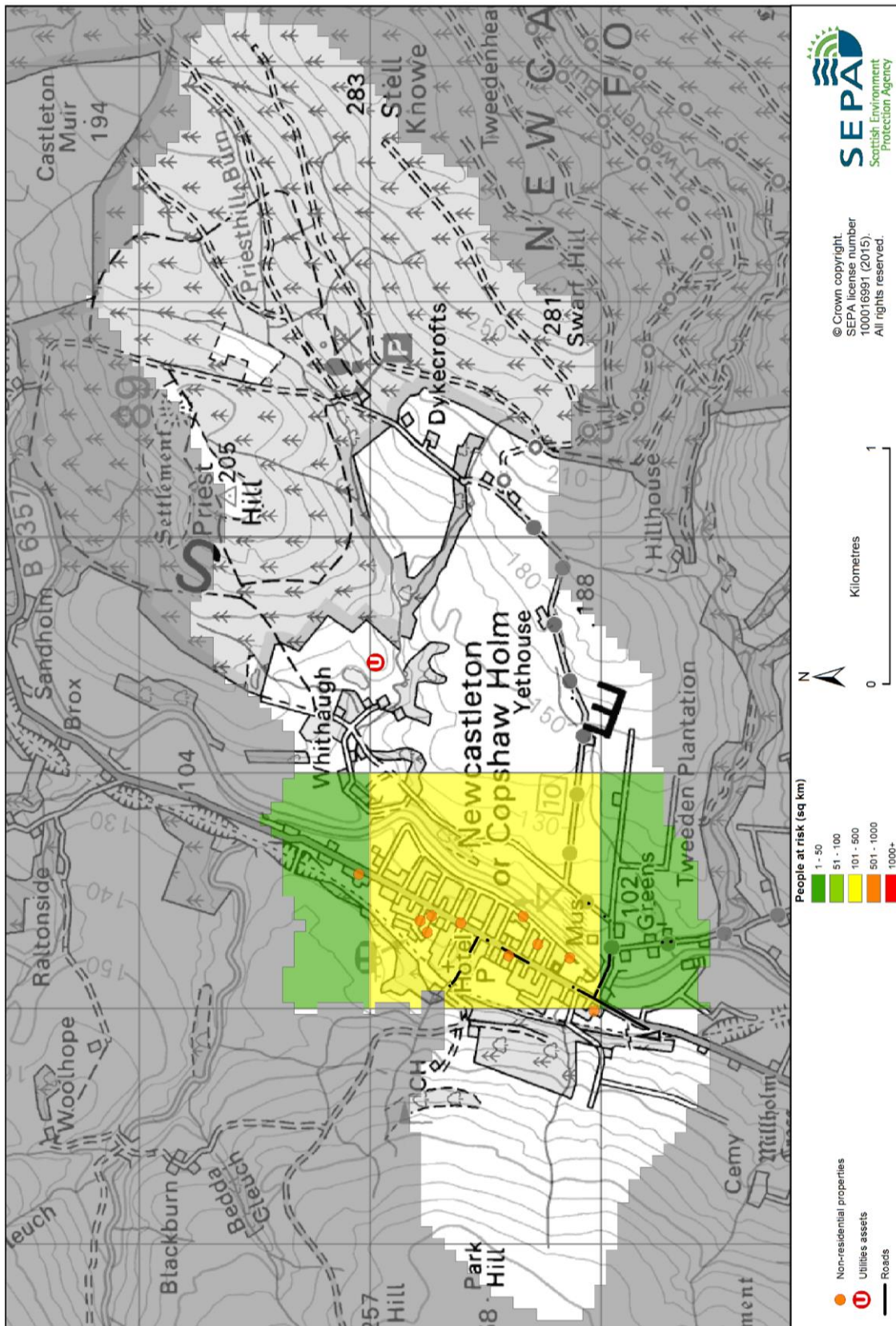


Figure 3: Impacts of flooding

History of flooding

A record of flooding in Liddesdale dates from the mid-1800s. Scottish Borders Council has records of significant flooding of the Liddel Water in the Newcastleton area on 1 January 1991.

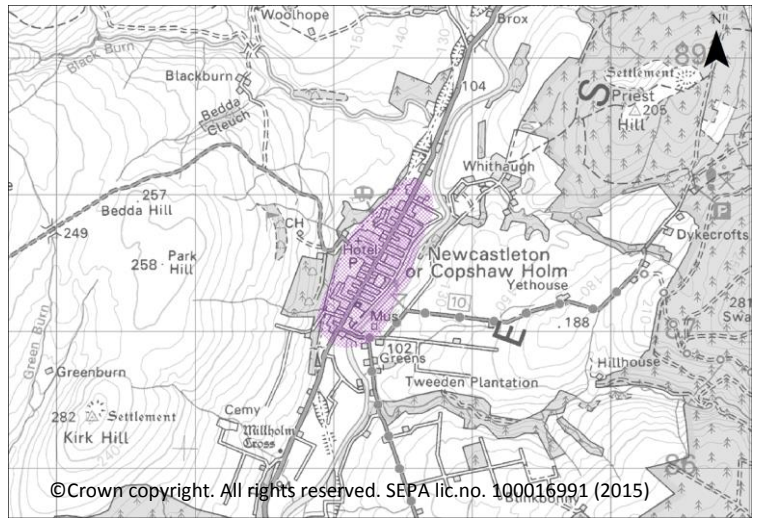
Newcastleton has suffered from three major floods in recent years, in February 1997, January 2001 and October 2005. The 2005 flood was reported by local residents as the worst in living memory and caused damage to 30 houses, equal to approximately 10% of residential properties.

Objectives to manage flooding in Potentially Vulnerable Area 14/03

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 Newcastleton Potentially Vulnerable Area.

Reduce risk to residential properties from river flooding within Newcastleton
Indicators: Target area:

- 130 residential properties
- <10 non-residential properties
- £150,000 Annual Average Damages



Objective ID: 14003

Target area	Objective	ID	Indicators within PVA
Newcastleton	Reduce the economic damages and risk to people from surface water flooding in Newcastleton	14037	* See note below
Applies across Solway Local Plan District	Avoid an overall increase in flood risk	14033	<ul style="list-style-type: none"> • 140 residential properties • £160,000 Annual Average Damages
Applies across Solway Local Plan District	Reduce overall flood risk	14040	<ul style="list-style-type: none"> • 140 residential properties • £160,000 Annual Average Damages
Applies across Solway 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 14/03 there are <10 residential properties at risk and Annual Average Damages of £12,000.

Actions to manage flooding in Potentially Vulnerable Area 14/03

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 Newcastleton 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	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 (140030005)		
Objective (ID):	Reduce risk to residential properties from river flooding within Newcastleton (14003)		
Delivery lead:	Scottish Borders Council		
Priority:	National:		Within local authority:
	98 of 168		5 of 6
Status:	Not started	Indicative delivery:	2016-2021
Description:	A study is recommended to develop upon previous studies, incorporating the most up to date information. The study will further investigate the feasibility of a flood protection scheme in Newcastleton, focusing on the benefit of direct flood defences on the Liddel Water and further property level protection scheme. This study should also consider natural flood management action to reduce runoff into the town. Other actions may also be considered to select the most sustainable combination of actions.		
Potential impacts			
Economic:	The flood protection study should consider how to reduce flood risk to 128 residential properties and 5 non-residential properties in this location, with potential damages avoided of up to £3.6 million.		
Social:	A reduction in flood risk would have a positive benefit to the health and wellbeing of the community. There may be changes in visual amenity and land use as a result of this action.		
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. To be in accord with the flood risk management strategy, the responsible authority		

Environmental:	should seek to ensure as part of the study that the action will not have an adverse effect on the integrity of the Langholm - Newcastleton Hills Special Protection Area. There is the potential for impacts on the Langholm - Newcastleton Hills Site of Special Scientific Interest. There is likely to be a loss of semi-natural habitat in the footprint and vicinity of the defences. There is the potential for the direct defences to have a negative impact on the settings of the Newcastleton Heritage Conservation Area and the few listed buildings in the area.
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Action (ID):	SURFACE WATER PLAN/STUDY (140370018)		
Objective (ID):	Reduce the economic damages and risk to people from surface water flooding in Newcastleton (14037)		
Delivery lead:	Scottish Borders Council		
Status:	Not started	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 (140400019)		
Objective (ID):	Reduce overall flood risk (14040)		
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 (140400030)		
Objective (ID):	Reduce overall flood risk (14040)		
Delivery lead:	SEPA		
Status:	Existing	Indicative delivery:	Ongoing
Description:	Continue to maintain the Newcastleton Village flood warning area which is part of the Newcastleton river flood warning scheme.		

Action (ID):	FLOOD FORECASTING (140400009)		
Objective (ID):	Reduce overall flood risk (14040)		
Delivery lead:	SEPA		
Status:	Existing	Indicative delivery:	Ongoing
Description:	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.		

Action (ID):	COMMUNITY FLOOD ACTION GROUPS (140030012)		
Objective (ID):	Reduce risk to residential properties from river flooding within Newcastleton (14003)		
Delivery lead:	Community		
Status:	Existing	Indicative delivery:	Ongoing
Description:	Scottish Borders Council is currently in discussion with Newcastleton and District Community Council with a view to forming a Resilient Communities Group which would take action in the event of a flood.		

Action (ID):	SELF HELP (140400011)		
Objective (ID):	Reduce overall flood risk (14040)		
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. Scottish Borders Council currently operates a Flood Product Subsidy, it is recommended that this should be continued. Flood protection products are offered at discounted prices to Scottish Borders households and businesses whose property is at risk from flooding.		

Action (ID):	AWARENESS RAISING (140400013)		
Objective (ID):	Reduce overall flood risk (14040)		
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>SEPA will engage with communities through the Scottish Borders Council Resilient Communities initiative</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 (140400007)		
Objective (ID):	Reduce overall flood risk (14040)		
Delivery lead:	Scottish Borders 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 (140400014)		
Objective (ID):	Reduce overall flood risk (14040)		
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 (140330001)		
Objective (ID):	Avoid an overall increase in flood risk (14033) Reduce overall flood risk (14040)		
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.		