

# Flood Risk Management Strategy

## Tweed Local Plan District

This section is the most relevant for individuals, communities and businesses seeking to understand their local flood risk and its management. There is an overview of the Local Plan District, as well as further detail for every Potentially Vulnerable Area. For each Potentially Vulnerable Area, there is a short description of the causes and consequences of flooding. The agreed objectives are clearly set out and, most importantly, the actions that will deliver these objectives are prioritised and described.

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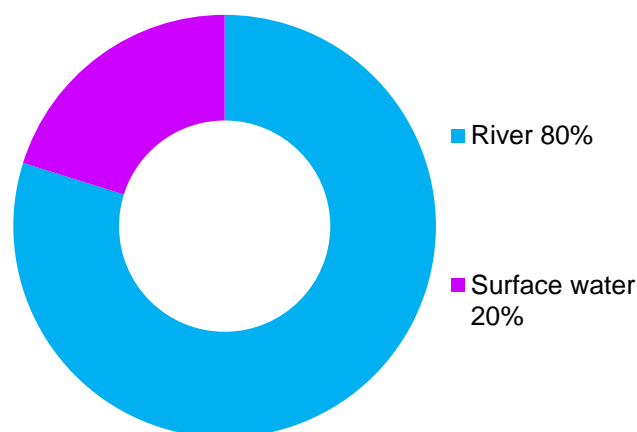
## 2.1 Summary of flooding in the Tweed Local Plan District

The Tweed Local Plan District covers an area of 4,341km<sup>2</sup> with a population of approximately 120,000. It contains six local authorities and 13 Potentially Vulnerable Areas.

### Flood risk in the Tweed

There are approximately 3,400 residential and 1,900 non-residential properties at risk of flooding within the Local Plan District. This equates to approximately 5% of all properties at risk of flooding nationally. Within the Local Plan District, approximately 6% of all residential and 20% of all non-residential properties are at risk and it is estimated that 88% of these properties are located within Potentially Vulnerable Areas. The Annual Average Damages from flooding (see glossary) are approximately £13 million.

River flooding is the main source of flood risk, followed by surface water flooding. The Annual Average Damages caused by river flooding are approximately £10 million and the damages caused by surface water flooding are approximately £2.7 million (Figure 1).



**Figure 1:** Annual Average Damages by flood source

Table 1 and Figure 3 show the number of properties at risk and the Annual Average Damages caused by flooding in the main towns and cities within the Local Plan District. This includes damages to residential properties, non-residential properties, transport and agriculture. Please note that economic damages to airports and rail infrastructure were not assessed, as information on damages at this scale is not available.

	Residential and non-residential properties at risk of flooding	Annual Average Damages
Hawick	990	£2.1 million <sup>1</sup>
Galashiels	960	£2.2 million <sup>1</sup>
Selkirk	640	£950,000
Innerleithen	540	£890,000
Peebles	510	£1.2 million
Jedburgh	250	£610,000
Kelso	110	£90,000
Earlston	110	£610,000
Melrose	70	£130,000
Broughton	50	£160,000

**Table 1:** Main areas with a risk of flooding

### Background information on the Tweed Local Plan District

The extent of the Tweed Local Plan District and the location of the Potentially Vulnerable Areas are shown in Figure 2. It includes the urban areas of Galashiels, Hawick, Peebles, Selkirk, Kelso, Biggar and Jedburgh.

The Tweed Local Plan District contains the Scottish part of the River Tweed catchment which is the second largest river in Scotland. The main tributaries of the River Tweed include the Biggar Water, Lyne Water, Eddleston Water, Etrick Water, Gala Water, Leader Water, Whiteadder Water, Blackadder Water and the River Teviot. The Tweed catchment also includes part of the Bowmont Water that flows into England. The Bowmont Water is a tributary of the English River Till that meets the River Tweed north east of Coldstream.

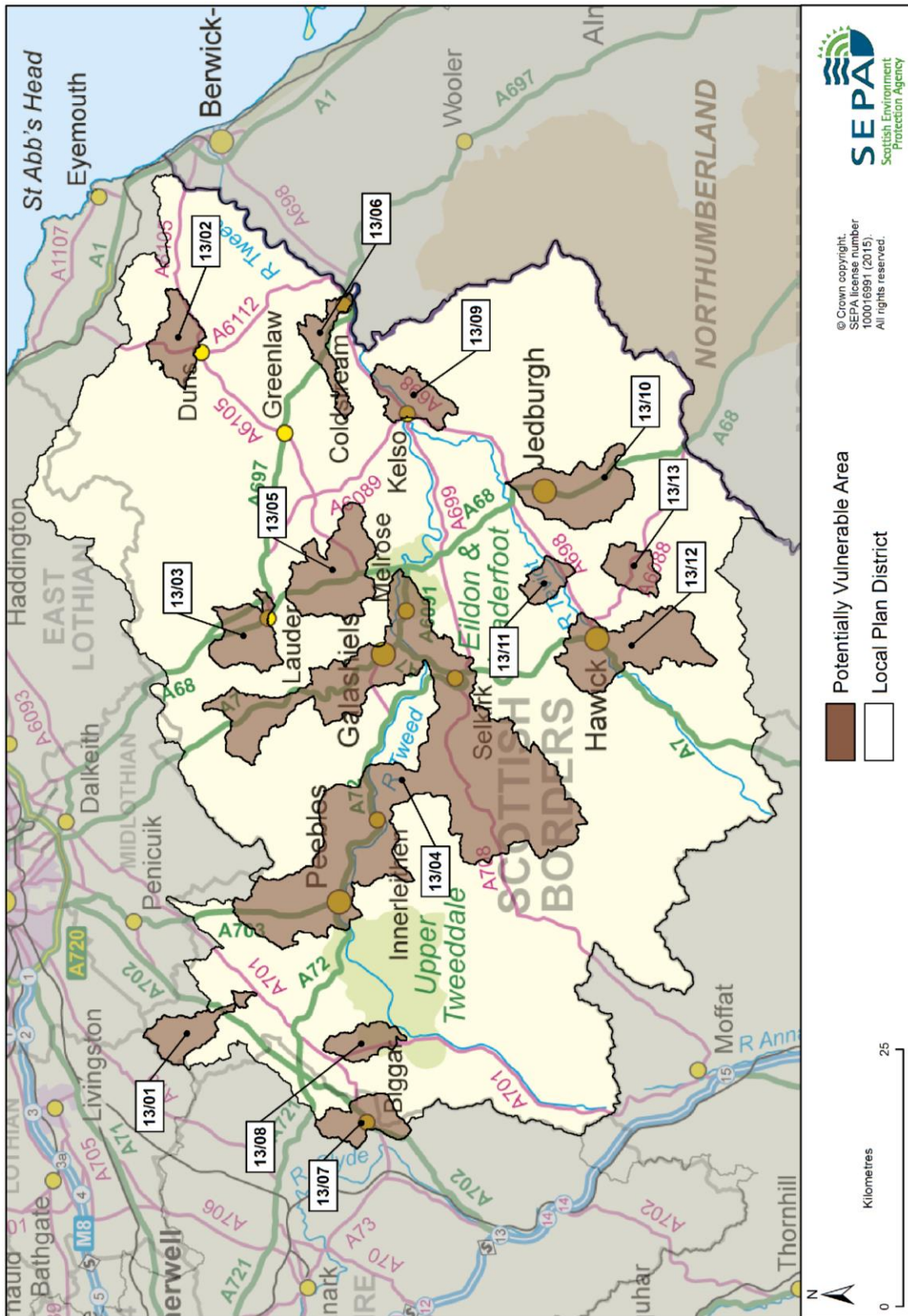
The largest lochs in the catchment include:

- the Fruid and Talla Reservoirs in the headwaters of the River Tweed;
- the West Water and Baddinsgill Reservoirs in the headwaters of the Lyne Water;
- the Megget Reservoir and St Mary's Loch in the headwaters of the Yarrow Water;
- the Ale Water Reservoir in the headwaters of the Ale Water;
- the Whiteadder and Watch Reservoirs in the headwaters of the Whiteadder Water.

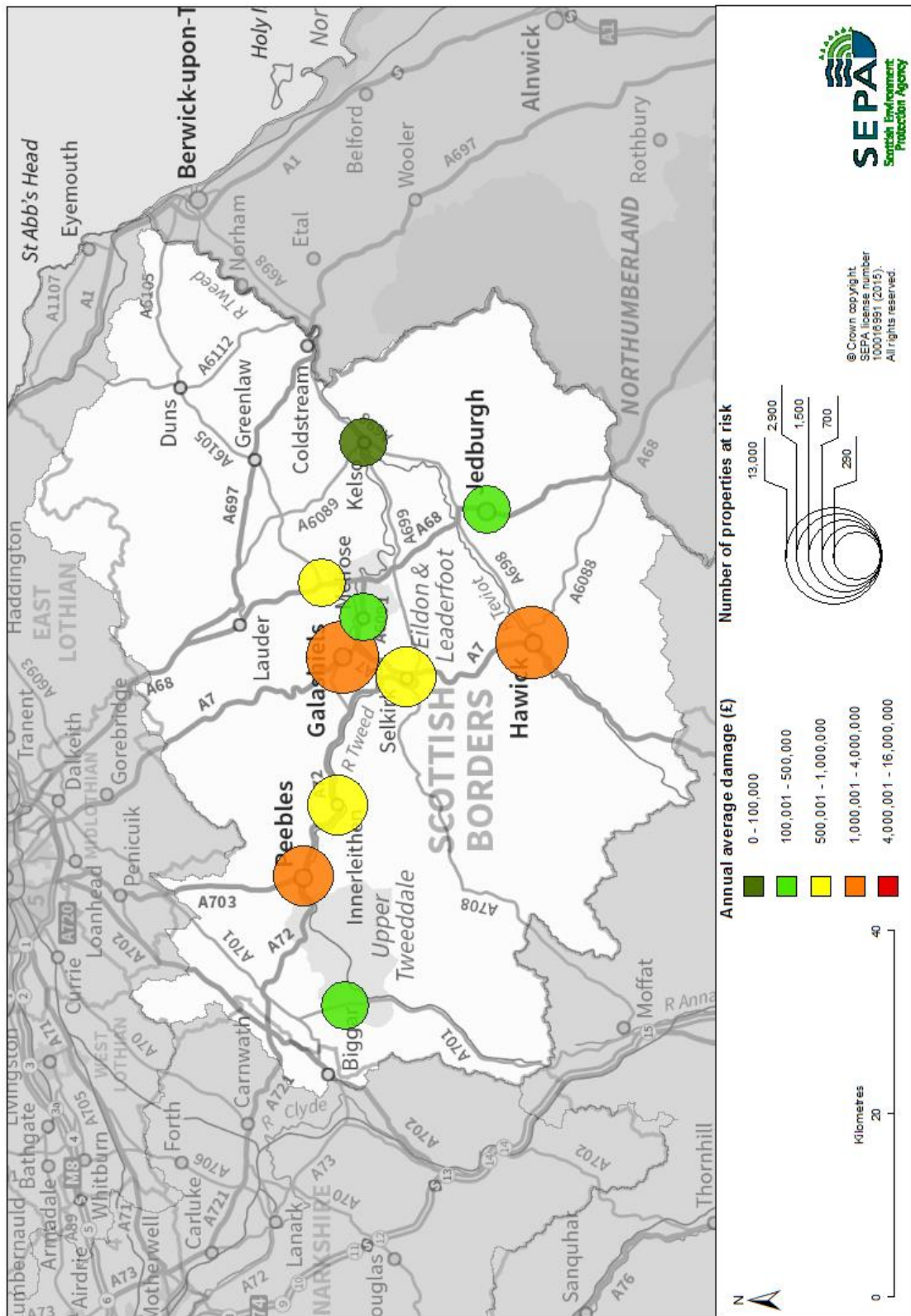
The Tweed catchment is largely rural with the headwaters flowing through steep hills and narrow valleys. The middle and lower parts of the catchment become less steep with more land used for agriculture and urbanisation. Across the area the main types of land cover include heather and grassland (55%), arable and horticultural land (22%), and coniferous and broadleaved woodland (18%). Urban areas account for less than 1% of total land cover.

Further details of flood risk from distinct sources can be found in the river and surface water sections of this report. The Tweed Local Plan District does not contain any coastline.

<sup>1</sup> The damages presented in this report are derived from SEPA data that is assessed at a strategic level. Scottish Borders Council has carried out more detailed assessments of flood risk that identify higher economic damages from river flooding in Hawick and lower economic damages from river flooding in Galashiels



**Figure 2:** The Tweed Local Plan District with Potentially Vulnerable Areas identified



**Figure 3:** The Tweed Local Plan District showing areas with most properties at risk of flooding and associated damages

## Objectives and actions in the Tweed Local Plan District

The objectives are the shared aims for managing flooding. Actions describe where and how flood risk will be managed. Objectives and actions have been set by SEPA and agreed by flood risk management responsible authorities following consultation.

Some flood risk management objectives and actions apply to all areas, whether designated as a Potentially Vulnerable Area or not. For example, flood risk can be managed through national planning policy or as part of ongoing statutory duties for local authorities. The focus of this Flood Risk Management Strategy is to manage flood risk in Potentially Vulnerable Areas where specific actions apply in addition to the generic actions listed below. Further detail on specific actions can be found in the relevant Potentially Vulnerable Area chapter. Local authorities may have further information on how they manage flooding across their area.

Target area	Objective(s)	ID	Indicators
Applies across Tweed Local Plan District	Avoid an overall increase in flood risk	13001	<ul style="list-style-type: none"> <li>• 3,400 residential properties</li> <li>• 1,900 non-residential properties</li> <li>• 7,500 people</li> </ul>
Applies across Tweed Local Plan District	Reduce overall flood risk	13033	<ul style="list-style-type: none"> <li>• 3,400 residential properties</li> <li>• 1,900 non-residential properties</li> <li>• 7,500 people</li> </ul>

<b>Action (ID):</b>	<b>FLOOD FORECASTING (130330009)</b>		
<b>Objective (ID):</b>	<b>Reduce overall flood risk (13033)</b>		
<b>Delivery lead:</b>	SEPA		
<b>Status:</b>	<b>Existing</b>	Indicative delivery:	<b>Ongoing</b>
<b>Description:</b>	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.		

<b>Action (ID):</b>	<b>SELF HELP (130330011)</b>		
<b>Objective (ID):</b>	<b>Reduce overall flood risk (13033)</b>		
<b>Delivery lead:</b>	-		
<b>Status:</b>	<b>Existing</b>	Indicative delivery:	<b>Ongoing</b>
<b>Description:</b>	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 the Resilient Communities Initiative, and ensuring that properties and businesses are insured against flood damage.		

<b>Action (ID):</b>	<b>AWARENESS RAISING (130330013)</b>		
<b>Objective (ID):</b>	<b>Reduce overall flood risk (13033)</b>		
<b>Delivery lead:</b>	Responsible authorities		
<b>Status:</b>	<b>Existing</b>	Indicative delivery:	<b>Ongoing</b>
<b>Description:</b>	<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>Local authorities will be undertaking additional awareness raising activities, further details will be set out in the Local FRM Plans.</p>		

<b>Action (ID):</b>	<b>MAINTENANCE (130330007)</b>		
<b>Objective (ID):</b>	<b>Reduce overall flood risk (13033)</b>		
<b>Delivery lead:</b>	Local authority, asset / land managers		
<b>Status:</b>	<b>Existing</b>	Indicative delivery:	<b>Ongoing</b>
<b>Description:</b>	<p>Local authorities have a duty to assess watercourses and carry out clearance and repair works where such works would substantially reduce flood risk. The local authorities 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>		

<b>Action (ID):</b>	<b>EMERGENCY PLANS / RESPONSE (130330014)</b>		
<b>Objective (ID):</b>	<b>Reduce overall flood risk (13033)</b>		
<b>Delivery lead:</b>	Category 1 and 2 Responders		
<b>Status:</b>	<b>Existing</b>	Indicative delivery:	<b>Ongoing</b>
<b>Description:</b>	<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>		

<b>Action (ID):</b>	<b>PLANNING POLICIES (130010001)</b>		
<b>Objective (ID):</b>	<b>Avoid an overall increase in flood risk (13001)</b> <b>Reduce overall flood risk (13033)</b>		
<b>Delivery lead:</b>	Planning authority		
<b>Status:</b>	<b>Existing</b>	Indicative delivery:	<b>Ongoing</b>
<b>Description:</b>	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.		



## 2.2 Potentially Vulnerable Areas

The table below summarises the actions to manage flood risk in the Potentially Vulnerable Areas of this Local Plan District. Further detail is provided in each Potentially Vulnerable Area.

PVA	Flood protection scheme/ works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning*	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/ response	Planning policies
13/01							✓	N/A	✓	✓			✓	✓	✓		✓	✓
13/02								N/A	✓	✓			✓	✓	✓		✓	✓
13/03							✓	✓	N/A	✓			✓	✓	✓		✓	✓
13/04	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓
13/05				✓			✓	✓	✓	✓			✓	✓	✓		✓	✓
13/06							✓	N/A	✓	✓			✓	✓	✓		✓	✓
13/07				✓			✓	✓	N/A	✓			✓	✓	✓		✓	✓
13/08				✓			✓	N/A	N/A	✓			✓	✓	✓		✓	✓
13/09						✓	✓	N/A	✓	✓			✓	✓	✓		✓	✓
13/10				✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
13/11								✓	✓	✓			✓	✓	✓		✓	✓
13/12	✓				✓	✓	✓	N/A	✓	✓		✓	✓	✓	✓		✓	✓
13/13				✓			✓	N/A	N/A	✓			✓	✓	✓		✓	✓

\*Note: N/A is used where there is no formal Flood Protection Scheme or flood warning scheme present.