



Tweed Local Plan District (LPD 13)

Draft flood risk management plans (2022-2028)

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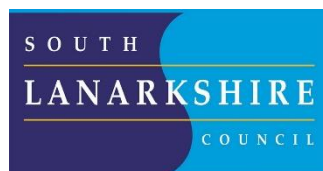
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This document has been produced in collaboration with:



Tweed Local Plan District

(LPD 13)

Draft flood risk management plans 2022-2028

The Tweed Local Plan District covers around 4,300km² and has a population of approximately 120,000 people. It spans southeast Scotland covering the catchment of the River Tweed from the uplands in the west and north to the Scotland-England border in the south. It includes the urban areas of Biggar, Galashiels, Hawick, Jedburgh, Kelso, Peebles and Selkirk.

The area is largely rural with mostly grassland, coniferous woodland and heather to the north, south and west, and agricultural land to the east. There are a number of reservoirs in the area including Fruid, Talla and Megget Reservoirs and St Mary's Loch in the Southern Uplands and the Whiteadder Reservoir in the Lammermuir hills. The River Tweed has many major tributaries including the River Teviot, Biggar Water, Ettrick Water, Gala Water, Jed Water and the Whiteadder Water.

There is a river and surface water flood risk, with a long history of significant river flooding. A number of flood protection schemes are in place across the area including a recently constructed Selkirk flood protection scheme. A number of large floods have been recorded in the area, including Storms Desmond and Frank in December 2015 that caused considerable damage from river flooding, affecting a large number of communities. More recently, in February 2020, Storm Ciara and Storm Dennis affected large parts of the Tweed area, causing flooding to homes, business and transport.

Currently it is estimated that there are almost 14,000 people and almost 10,000 homes and businesses at risk from flooding. This may increase to 16,000 people and around 11,000 homes and businesses by the 2080s due to climate change. The expected annual cost of flooding over a long period of time is around £11.6 million.

SEPA lead development of the flood risk management plans for Scotland and delivery of flood warning services. Local flood risk management planning is led by Scottish Borders Council, who is the lead authority. Other responsible authorities include Scottish Water and two other local authorities (East Lothian and South Lanarkshire). They are

supported by Scottish Government agencies including Forestry and Land Scotland, Scottish Forestry and Transport Scotland.

A Cross Border Advisory Group is in place in the Tweed Local Plan District to advise the Environment Agency, SEPA and local authorities on flooding issues that straddle the border. The group consider how the relevant authorities should coordinate their work in order to ensure that they understand how the impact of flood risk on one side of the border is affected by actions or inactions on the other side of the border.

Within this Local Plan District, actions are regularly carried out by SEPA and responsible authorities to help prepare communities for potential flooding and reduce the impact of any flooding that does occur.

Actions across the Local Plan District

SEPA and responsible authorities carry out actions in all areas of the Local Plan District which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. The following actions are due to take place over the next six years, and most of these are carried out on an ongoing basis.

	Awareness raising
Action	<p>SEPA the responsible authorities and other organisations such as the Scottish Flood Forum work together to help communities understand the risk of flooding and what actions individuals can take through national and local initiatives. Improved awareness of flood risk and actions that prepare individuals, homes and businesses for flooding can reduce the overall impact of flooding.</p> <p>Local authorities undertake additional awareness raising activities when developing any specific project proposals and will engage with community resilience groups and local communities.</p> <p>Scottish Flood Forum support flood risk communities by raising community awareness, promoting self-help, developing community groups and establish a recovery support programme after a flood.</p>

	Emergency response and plans
Action	Many organisations, including local authorities, the emergency services and SEPA provide an emergency response to flooding. Emergency plans are prepared and maintained under the Civil Contingencies Act 2004 by Category 1 and 2 Responders and are coordinated through regional and local resilience partnerships, often supported by voluntary organisations. They set out the steps to be taken to maximise safety and minimise impacts during flooding. Emergency plans may also be prepared by individuals, businesses, organisations or communities. Scottish Water is a Category 2 responder under the Civil Contingencies Act 2004 and will support regional and local resilience partnerships as required.

	Flood forecasting
Action	The Scottish Flood Forecasting Service is a partnership between SEPA and the Met Office. The service continues to produce a daily, national flood guidance statement, issued to emergency responders, local authorities and other organisations with flood risk management duties. As the flood warning authority for Scotland SEPA continues to provide its flood warning service issuing flood alerts and warnings when required, giving people a better chance of reducing the impact of flooding on their home or business.

	Flood Warning Development Framework
Action	<p>SEPA will publish a new Flood Warning Development Framework by March 2022, which will detail its ambitions and strategic actions to maintain and improve our flood warning service across Scotland.</p> <p>SEPA will continue to develop the Scottish Flood Forecast, a 3 day forecast of flood risk across Scotland and bring together all live information such as flood warnings, river levels and rainfall data into a central hub easily accessible for the public.</p> <p>Working in close partnership with the Met Office through the Scottish Flood Forecasting Service, SEPA will develop its capability in surface water flooding forecasting, focusing initially on the transport sector to support climate-ready infrastructure. SEPA will also undertake a prioritised improvement programme of existing river and coastal flood warning schemes to provide more accurate forecast with improved lead time.</p>

	Guidance development
Action	<p>The Scottish Government and SEPA will develop and update guidance to inform flood risk management projects. This guidance will be produced by June 2022 and will look at how best to adapt to the long-term impacts of climate change and the most appropriate methods of assessing the benefits of flood risk management actions.</p> <p>Technical guidance to support flood risk management partners will also be reviewed and updated by SEPA where required.</p>

	Hazard mapping updates
Action	An understanding of flooding is essential to develop a plan led risk-based approach to flood risk management. SEPA will continue to update their national hazard mapping, which shows the likelihood of flooding in Scotland from different flooding sources. (Flood Maps link) SEPA will continue to develop the hazard mapping viewer to make it easier for the public, partners and stakeholders to access data on the likelihood of flooding.

	Land use planning
Action	<p>National planning policies set out the Scottish Ministers' priorities for the operation of the planning system and for the development and use of land. Under this approach, new development in areas with medium to high likelihood of flooding should generally be avoided. Current national planning policies, the Scottish Planning Policy and accompanying Planning Advice notes restrict development within the floodplain and limit exposure of new receptors to flood risk. Local planning policies may place further requirements within their area of operation to restrict inappropriate development and prevent unacceptable risk.</p> <p>Local authorities, SEPA and Scottish Water all have a role to support sustainable development.</p>

	Maintenance
Action	<p>Local authorities have a duty to assess bodies of water and to carry out clearance and repair works where such works would substantially reduce flood risk. Local authorities are also responsible for the drainage of roads. In addition, local authorities may also be responsible for maintenance of any existing flood protection schemes or works.</p> <p>Scottish Water will continue to undertake risk-based inspection, maintenance and repair on the public sewer network.</p> <p>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>

	Natural flood management mapping
Action	SEPA will review and update the opportunities mapping for natural flood management. This work will focus on the suburban environment and look at linking blue-green infrastructure with the surrounding natural catchment. Natural flood management seeks to store or slow down flood waters through measures such as the planting of woodlands, wetland creation, river restoration, or the creation of intertidal habitats. In addition to flooding benefits, natural flood management measures can also provide many additional benefits to biodiversity, water quality and recreation.

	National flood risk assessment
Action	Understanding the future impacts of climate change remains a central theme of SEPA's flood risk management activity. SEPA will use the latest UK information on climate change to support an improved understanding of the changes in flood risk across the 21 st century. SEPA will use the most suitable data to develop the National Flood Risk Assessment 2024. This assessment will be used to identify future Potentially Vulnerable Areas.

	National surface water mapping
Action	The National Flood Risk Assessment 2018 identified that surface water flooding has the potential to impact more properties in Scotland than any other source of flooding. Over the next six-year cycle SEPA will look to vastly improve its national understanding of surface flood risk by undertaking a wholesale update of the national surface water maps to reflect developments in data and understanding, including the impact of climate change.

	Reservoirs
Action	SEPA will continue to develop its assessment of flood risk from dam failure and use these assessments to direct a proportionate regulatory approach to ensure reservoir safety. Over the next management cycle we will implement further developments of our flood warning capabilities in the unlikely event of reservoir failure.

	Scottish Flood Defence Asset Database
Action	We are in a global climate emergency. The evidence is clear. In Scotland one of the main impacts of climate change will be increased flooding. SEPA will push forward the development of adaptation planning within Scotland. This work will start by reviewing and developing our understand of how and when Scotland's flood defence assets can be adapted to continue to provide vital protection from flooding in the future.

	Self help
Action	<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 flood resilience measures, signing up to Floodline, engaging with their local flood group, and ensuring that properties and businesses are insured against flood damage.</p> <p>Responsible authorities and SEPA will continue to develop the understanding of flood risk to communities and promote measures to help individuals and businesses to reduce their risk.</p>

Potentially Vulnerable Areas

Potentially Vulnerable Areas (PVA) were designation in 2018 based on the potential current or future risk from all sources of flooding. This designation was informed by the National Flood Risk Assessment ([link](#)). As part of continued analysis of flood risk, the National Flood Risk Assessment and Potentially Vulnerable Areas (PVA) will be reviewed every six years to take on board any new information. There are 12 Potentially Vulnerable Areas (PVA) in this Local Plan District. Following sections provide more information on these areas.

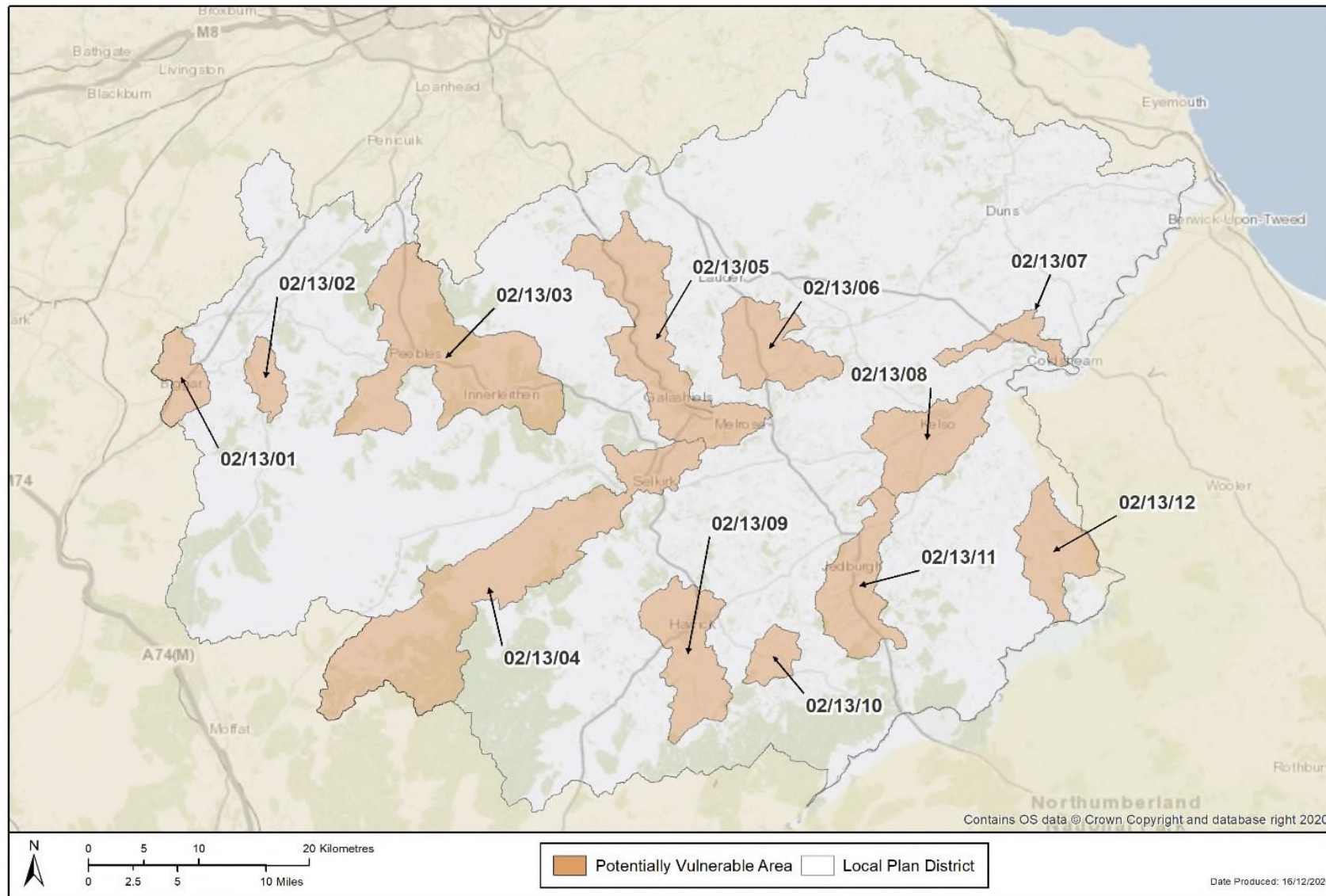


Figure 1. Potentially Vulnerable Areas in Tweed Local Plan District

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Click the [blue text](#) to select your area of interest

PVA Ref	PVA NAME	Local authority
02/13/01	Biggar	South Lanarkshire
02/13/02	Broughton	Scottish Borders
02/13/03	Peebles, Innerleithen and the Manor Valley	Scottish Borders
02/13/04	Selkirk and the Ettrick Valley	Scottish Borders
02/13/05	Galashiels and Stow	Scottish Borders
02/13/06	Earlston	Scottish Borders
02/13/07	Coldstream	Scottish Borders
02/13/08	Kelso	Scottish Borders
02/13/09	Hawick	Scottish Borders
02/13/10	Bonchester Bridge	Scottish Borders
02/13/11	Jedburgh	Scottish Borders
02/13/12	Bowmont Valley	Scottish Borders

02/13/01 (Biggar)

This area is designated as a Potentially Vulnerable Area due to river flood risk to Biggar. The main source of flooding is the Biggar Burn and there is also risk of flooding from surface water. There is a history of flooding in the area including flooding during Storm Desmond in December 2015.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Biggar

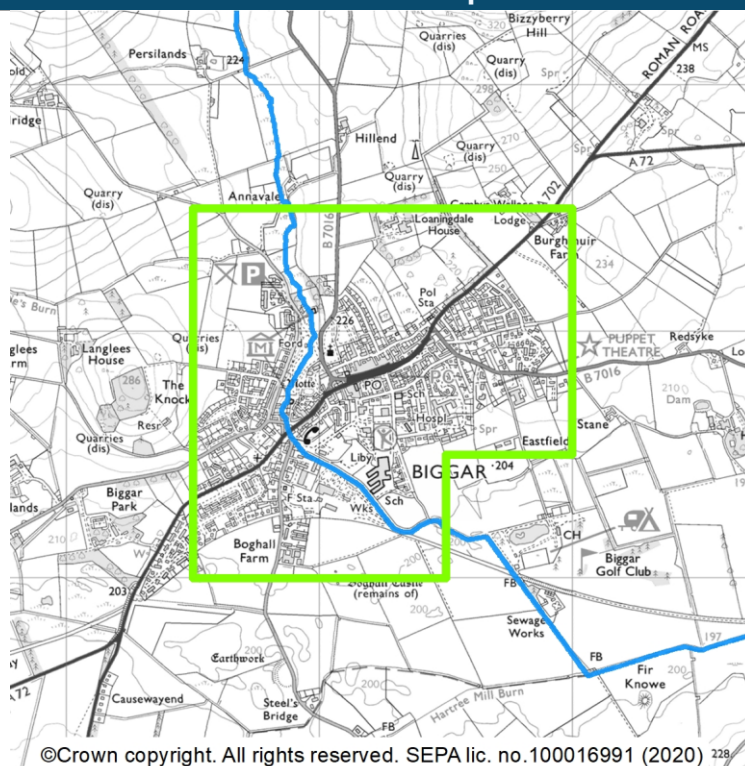
(target area 281)

Biggar (target area 281)

Summary

The town of Biggar is located on the banks of Biggar Burn and within the South Lanarkshire Council area. The main source of flooding in the catchment is river flooding, and there is also a risk of surface water flooding. There are approximately 120 people and 80 homes and businesses currently at risk from flooding.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by a sewer flood risk assessment. There are limited records of flooding in this target area.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2811	Avoid flood risk	Avoid inappropriate development that increases flood risk in Biggar
2812	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Biggar.
2813	Reduce flood risk	Reduce the risk of flooding in Biggar

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood study (options appraisal) (Ref: 28101)	
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The flood study which is currently underway in Biggar should be completed as planned. Following the completion of the flood modelling, if risk is confirmed, the feasibility of a range of flood risk management options should be considered.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

Strategic mapping improvements (Ref: 28102)	
Action	SEPA will continue to update flood maps based on new information.
Action detail	SEPA will seek opportunities to align flood risk management and river restoration priorities at this location. SEPA will await the conclusion of the flood studies and review their suitability to inform updates to existing flood mapping before progressing further with this action.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

02/13/02 (Broughton)

This area is designated as a Potentially Vulnerable Area due to flood risk to Broughton. The main source of flooding is the Broughton Burn and the Biggar Water and there is also risk of flooding from surface water. Several floods have occurred in this area, including recent flooding caused by surface water flooding roads and homes.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

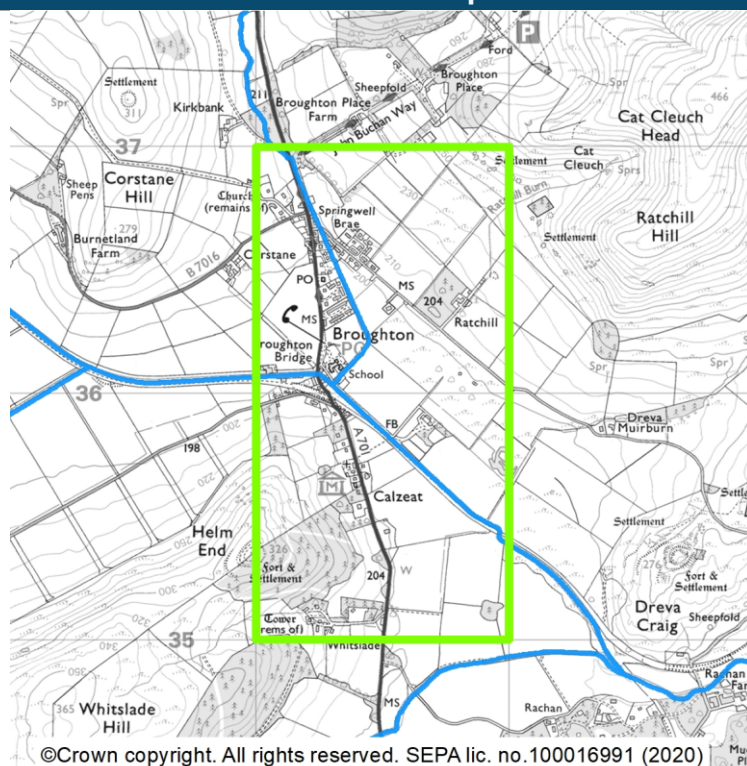
Broughton (target area 271)

Broughton (target area 271)

Summary

Broughton lies at the confluence of the Broughton Burn and Biggar Water and within the Scottish Borders Council area. The main source of flooding is river flooding, however there is also some risk from surface water. There are approximately 70 people and 45 homes and businesses currently at risk of flooding, which is a significant proportion of the community. This is likely to increase to 80 people and 50 homes and businesses by the 2080s due to climate change.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national assessment for river flooding is improved by a flood study for Broughton completed in 2019. There is a long history of flooding in this area from the Broughton Burn and surface water. A notable flood occurred in August 1998 when torrential rain and flooding from the Broughton Burn impacted streets and homes, forcing 1 resident to be evacuated. A recent flood was recorded in June 2018 when surface water flowed down the A701 into Broughton, flooding 2 properties.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2711	Avoid flood risk	Avoid inappropriate development that increases flood risk in Broughton
2712	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Broughton
2713	Reduce flood risk	Reduce the risk of surface water flooding and river flooding from the Broughton Burn and Biggar Water in Broughton

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Surface water management plan (Ref: 27101)	
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Scottish Borders Council should develop a surface water management plan for Broughton. Current and long term flood risk should be considered. The impacts of climate change should also be considered as part of the plan.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with Scottish Water and other actions in the area.

Community engagement (Ref: 27102)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Awareness raising and community engagement should be carried out based on the outcomes of the surface water management plan.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Flood scheme or works design (Ref: 27103)	
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The Broughton Flood Study was carried out in 2019 and identified a preferred option to manage flood risk which would provide 200-year flood standard of protection. The outline and detailed design for the Broughton Flood Protection Scheme should be progressed. Scottish Borders Council should assess and refine proposed options to manage flood risk in Broughton, in particular how climate change can be accommodated. There should be consideration of the current and long term flood risk and how the area will adapt to changes in flood risk through development of an adaptation plan.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood scheme or works implementation (Ref: 27104)	
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	The responsible authority proposes this action as the best option for managing flood risk in this community. The delivery of this action is subject to funding being made available. Scottish Borders Council should continue to develop the selected option to construction.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

02/13/03 (Peebles, Innerleithen and the Manor Valley)

This area is designated as a Potentially Vulnerable Area due to flood risk to Peebles, Innerleithen, Walkerburn, Eddleston and the remote communities in the Manor Valley. The main source of flooding are the River Tweed, Eddleston Water, Leithen Water and other minor watercourses. There is also risk of flooding from surface water in Peebles. There is a long history of significant flooding to communities in this area and frequent smaller floods causing disruption. Major river flooding recently occurred throughout the area as a result of Storms Desmond and Storm Frank.

There are 5 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

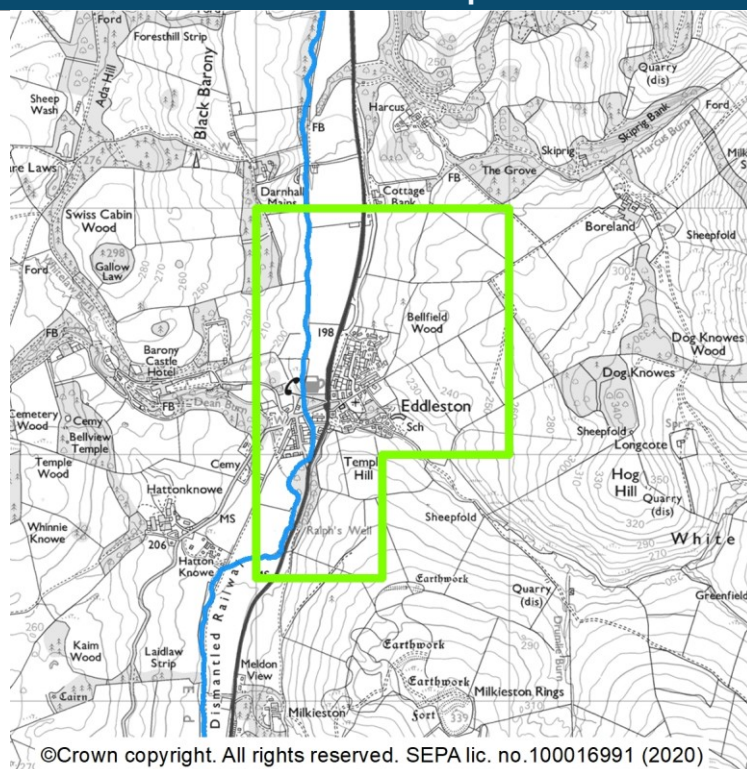
Eddleston	(target area 275)
Innerleithen	(target area 291)
Peebles	(target area 306)
Walkerburn	(target area 321)
Manor Valley	(target area 327)

Eddleston (target area 275)

Summary

Eddleston is a small village located north of Peebles in the Scottish Borders Council area. The main source of flooding within the area is river flooding. There are approximately 90 people and 50 homes and businesses currently at risk. This is likely to increase to 100 people and 60 homes and businesses by the 2080s due to climate change.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by the Eddleston Water modelling study completed in 2019. The study looked in detail at the lower part of the Eddleston Water as it flows through Peebles. Understanding of river flooding is further improved by the Eddleston Water Restoration Project which looks at natural flood management actions across the catchment. There are periodic records of flooding in this area. A notable flood occurred in November 1999 when the Eddleston Water overflowed and flooded 6 homes.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2751	Avoid flood risk	Avoid inappropriate development that increases flood risk in Eddleston
2752	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Eddleston
2753	Reduce flood risk	Reduce the risk of river flooding from the Eddleston Water in Eddleston

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood warning maintenance (Ref: 27501)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Eddleston Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 27502)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Information gathered should be used to inform any future flood studies.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Flood study (Ref: 27503)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	An initial study to improve understanding of river flooding from Eddleston Water and Longcote Burn should be undertaken.
Coordination	Action delivery lead is Scottish Borders Council. The action should be coordinated with the Eddleston Water restoration project.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

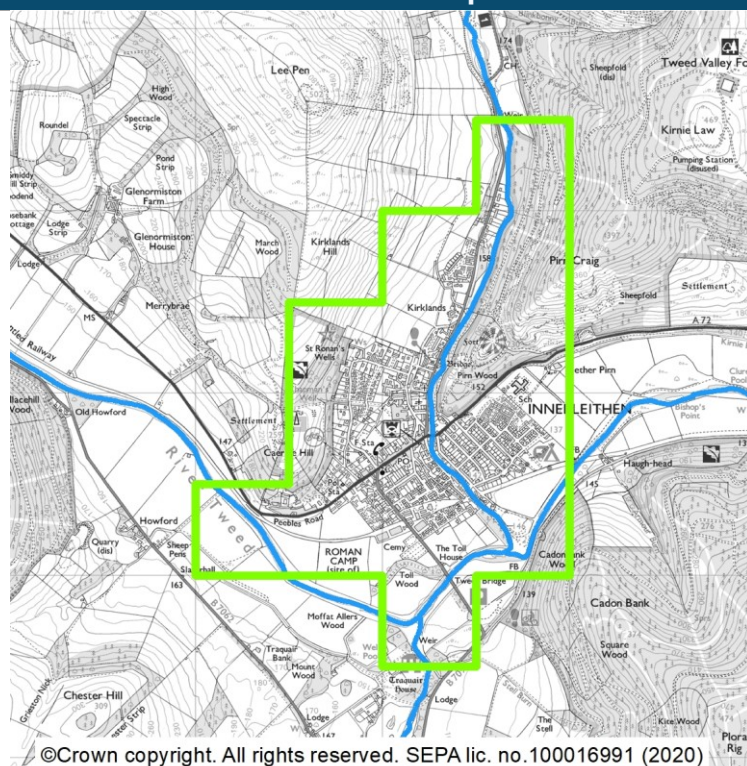
There is an opportunity to work jointly with the Eddleston Water Restoration Project. The project aims to reduce flood risk and restore the Eddleston Water for the benefit of the local community and wildlife. It is a partnership project between multiple organisations, led by the Tweed Forum and funded by the Scottish Government, Interreg and SEPA.

Innerleithen (target area 291)

Summary

The town of Innerleithen is located on the north side of the River Tweed within the Scottish Borders Council area. The main source of flooding in Innerleithen is river flooding. The local authority has carried out a flood study in this area. The study showed that there are approximately 50 homes and businesses at risk of flooding from the Leithen Water and 30 homes and businesses at risk from Chapmans Burn. This is estimated to increase to around 190 homes and businesses at risk from Leithen Water and 40 homes and businesses at risk from Chapmans Burn.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by a flood study for Innerleithen carried out by the local authority. The national level assessment for surface water flooding is improved by a sewer flood risk assessment carried out by Scottish Water. There is a long history of flooding in this area with floods occurring recently in December 2015, June 2016 and October 2020.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2911	Avoid flood risk	Avoid inappropriate development that increases flood risk in Innerleithen
2912	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of Innerleithen Hall Street Flood Protection Scheme
2913	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Innerleithen

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood warning maintenance (Ref: 29101)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Tweed flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 29102)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Leithen Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 29103)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should be informed with the findings from the flood study.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 29104)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	Scottish Borders Council should continue to support the Innerleithen Community Resilience Group.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Flood defence maintenance (Ref: 29105)

Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Scottish Borders Council should continue to maintain the existing Innerleithen Hall Street Flood Protection Scheme (Chapman's Burn). This includes continuous inspections of the scheme on a yearly basis and undertaking maintenance as required to ensure the scheme operates at peak efficiency
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Flood study (options appraisal) (Ref: 29106)

Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A flood study has been completed in Cycle 1. The study quantified the flood risk and investigated what flood risk management measures could be implemented to reduce the risk of flooding in Innerleithen. Although the flood risk is not as extensive as initially thought, further investigation should be carried out to refine what flood risk management measures are appropriate for Innerleithen, taking consideration of climate change. This analysis should include monitoring of flows in the Chapmans Burn.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

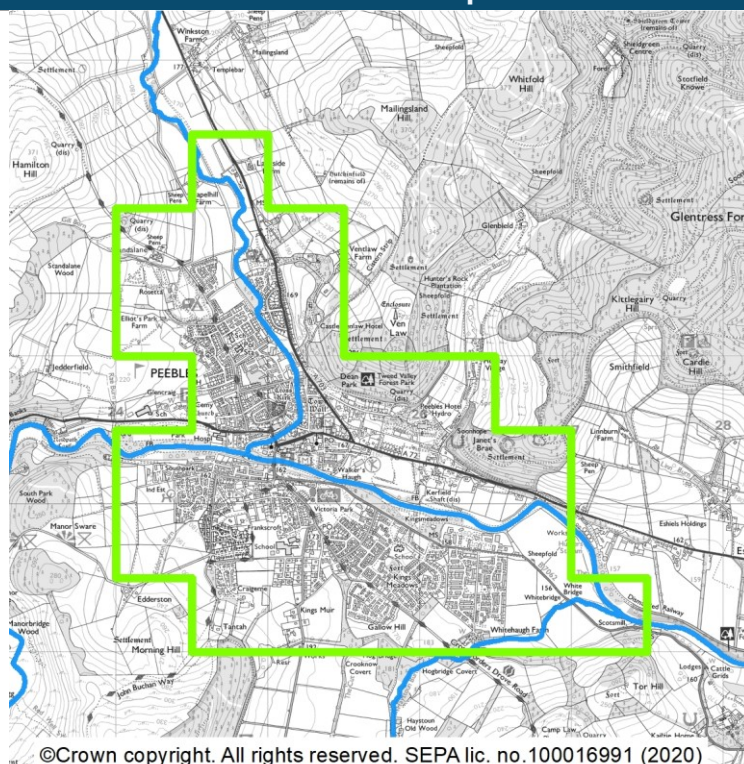
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Peebles (target area 306)

Summary

Peebles is located on the banks of the River Tweed, within the Scottish Borders Council area. The main source of flooding in Peebles is river flooding, however there is also a risk from surface water. The local authority has carried out a flood study in this area. The study showed that there are approximately 740 people and 460 homes and businesses at risk from flooding. This is estimated to increase to 970 people and 600 homes and businesses by the 2080s due to climate change. There are also utilities, community facilities and road infrastructure at risk from flooding.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by a flood study for Peebles. National understanding of surface water is improved by a surface water management plan, the South Peebles Surface Water Flood Study and a sewer flood risk assessment. There is a long history of flooding in this area with frequent flooding recorded. A notable flood occurred in December 2015 when Storm Frank caused serious flooding in the area, when the Eddleston Water (Cuddy Burn) and the River Tweed flooded. Homes were flooded and 15 residents had to be rescued by boat. A local nursing home also flooded and 25 elderly residents had to be evacuated. Roads had to close due to structural damage and power cables were damaged. A recent flood occurred during Storm Ciara in February 2020 when the River Tweed burst its banks, inundating the Tweed Green area.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
3061	Avoid flood risk	Avoid inappropriate development that increases flood risk in Peebles
3062	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of Peebles South Park Flood Protection Scheme
3063	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Peebles
3064	Reduce flood risk	Reduce the risk of surface water flooding in Peebles.
3065	Reduce flood risk	Reduce the risk of river flooding from the River Tweed, the Eddleston Water, the Haystoun Burn and the Edderston Burn in Peebles.

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 30601)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A flood protection scheme has been proposed for Peebles. The preferred scheme for Peebles covers four of the five main rivers in the town and should be phased as appropriate. The scheme should be taken forward into outline design and detailed design. There should be consideration of the current and long term flood risk and how the flood protection scheme and area will adapt to changes in flood risk through development of an adaptation plan.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

	Flood scheme or works implementation (Ref: 30603)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	The responsible authority proposes this action as the best option for managing flood risk in this community. The delivery of this action is subject to funding being made available. Scottish Borders Council should progress the formal process of promoting a flood protection scheme for Peebles. Procurement of a contractor for the construction phase should begin once formal approval to progress with a scheme has been given and detailed design is complete. Upon completion of the scheme Scottish Borders Council should submit all as built and scheme information to SEPA for registration on the Scottish Flood Defence Asset Database.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood defence maintenance (Ref: 30604)

Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Scottish Borders Council should continue to maintain the existing Edderston Burn Flood Protection Scheme. This includes continuous inspections of the scheme on a yearly basis and undertaking maintenance as required to ensure the scheme operates at peak efficiency. Any adaptation plan that is developed for Peebles should include the future resilience of this scheme due to the impacts of climate change.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 30605)

Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Eddleston Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 30606)

Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Tweed flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 30607)

Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should include the development of a flood protection scheme for Peebles.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 30608)

Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	The existing Peebles (Tweed Green) Resilient Communities Group and wider Peebles Resilient Communities Group should continue in the area and continue to be supported by Scottish Borders Council.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

	Flood scheme or works design (Ref: 30602)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The development of a flood protection scheme/works for surface water flooding should continue to the design stage, based on the outcomes of the surface water management plan. There should be consideration of the current and long term flood risk and if climate change impacts are found to be significant, surface water management should be included in the adaptation plan.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

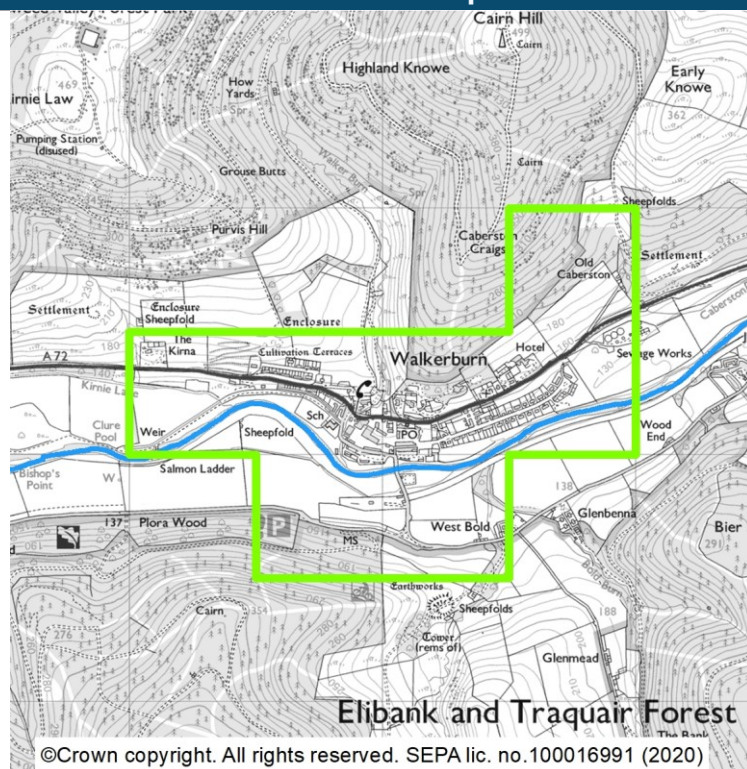
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Walkerburn (target area 321)

Summary

Walkerburn is a small village located on the northern bank of the River Tweed, within the Scottish Borders Council area. The main source of flooding in Walkerburn is river flooding. There are approximately 80 people and 70 homes and businesses currently at risk from flooding.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by the Peebles flood study with hydraulic modelling extended to include Walkerburn. The national assessment for surface water is improved by a sewer flood assessment. There are periodic records of flooding in this area. A notable flood occurred in December 2015 when Storm Desmond caused substantial flooding, destroying the bowling club clubhouse and flooding fields, gardens and local roads. More recently, low-lying land and the bowling club green were flooded in February 2020.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
3211	Avoid flood risk	Avoid inappropriate development that increases flood risk in Walkerburn
3212	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Walkerburn
3213	Reduce flood risk	Reduce the risk of river flooding from the River Tweed and the Walker Burn in Walkerburn.

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood warning maintenance (Ref: 32101)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Tweed flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 32102)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should include any future flood study carried out in the area.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 32103)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	Scottish Borders Council should continue to support the Walkerburn and District Resilient Communities Group.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

	Flood study (Ref: 32104)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Flood modelling has been carried out as part of cycle 1 which quantifies the risk of flooding to Walkerburn from the Tweed at various return periods. A flood study is required to further quantify this risk, taking into consideration the smaller watercourses in and around the village. If required the flood study should develop and appraise any options highlighted to manage flood risk in Walkerburn.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

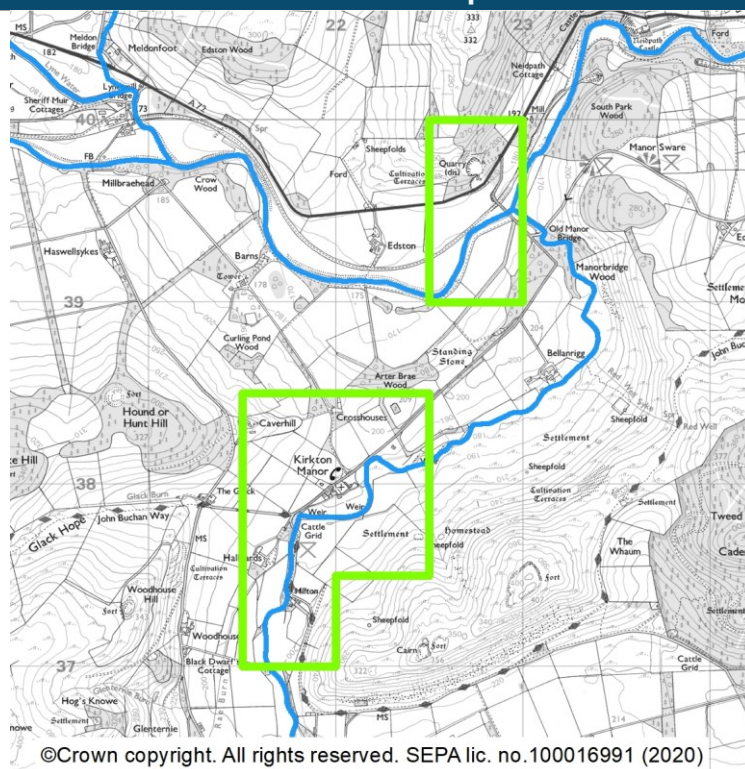
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Manor Valley (target area 327)

Summary

The Manor Valley covers a number of small communities including the village of Kirkton Manor which is located on the banks of Manor Water in the Scottish Borders. The main source of flooding is river flooding from the Manor Water. Whilst there are a limited number of homes and businesses directly at risk of flooding, there is a history of flooding in the area. The access road along the valley floods at several locations and cuts off communities located in the valley. The flooding of roads is deep and makes the roads impassable.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources and this information has highlighted the risk of flooding in this target area. There are limited records of flooding in this target area. A notable flood occurred in December 2015 when the Manor Water burst its banks during Storm Frank leading to flooding of local roads and low-lying fields. This resulted in the Manor Valley community being cut off from the rest of the area.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
3271	Avoid flood risk	Avoid inappropriate development that increases flood risk in the Manor Valley
3272	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in the Manor valley.

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Emergency plan (Ref: 32701)	
Action	The plan to coordinate responses to emergency incidents between organisations, including local authorities, the emergency services and SEPA, is to be maintained and executed as required.
Action detail	Scottish Borders Council should review and update as appropriate the Severe Weather Emergency Plan as information becomes available. The local resilient communities road closure plan for the Manor Valley should also be reviewed and updated as part of this process.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 32702)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should be based on current knowledge.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 32703)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	Manor Valley is part of the Manor, Stobo and Lyne Resilient Communities area. Scottish Borders Council should continue to support the activities of resilient communities, which play an active role in the roads closure procedure for the valley in times of flooding.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/04 (Selkirk and the Ettrick Valley)

This area is designated as a Potentially Vulnerable Area due to flood risk to Selkirk, Lindean and the remote communities in the Ettrick Valley. The main risk is river flooding from the Ettrick Water. In 2016 the local authority completed a flood protection scheme that protects Selkirk from river flooding. There is a long history of flooding in this area, including widespread flooding of properties prior to the construction of the flood protection scheme, and more recent flooding of the road near Ettrick.

There are 3 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

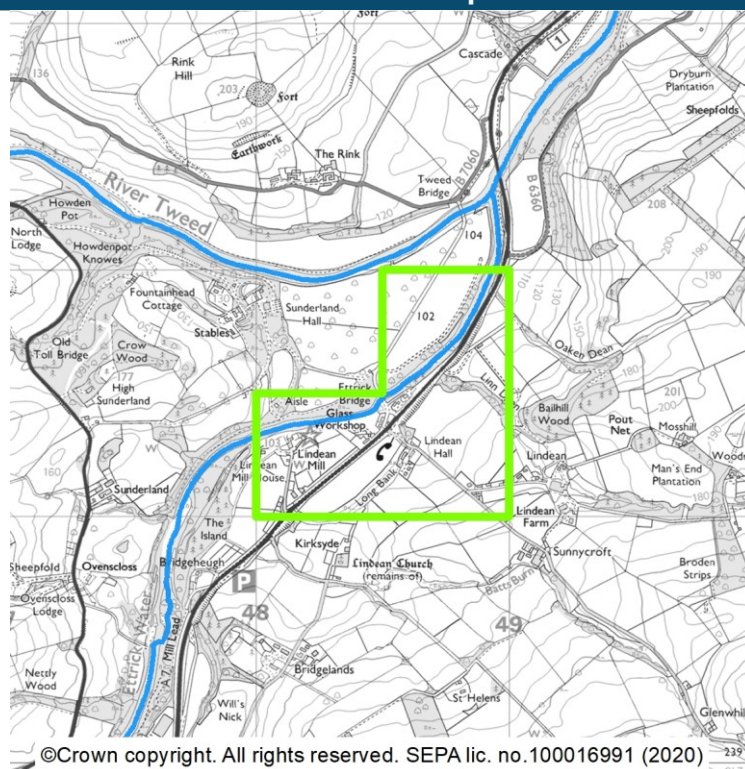
Lindean	(target area 274)
Upper Ettrick	(target area 278)
Selkirk	(target area 313)

Lindean (target area 274)

Summary

Lindean is a small village which is located just north of the town Selkirk and within the Scottish Borders Council area. The main source of flooding in Lindean is river flooding. There are approximately 20 people and 10 homes and businesses currently at risk from flooding. This is likely to increase to 11 homes and businesses by the 2080s due to climate change.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by a flood study for Lindean. There is a long history of flooding in this area. A notable flood occurred in October 1977 when the Ettrick Water flooded numerous areas between Selkirk and Lindean including homes and businesses. Property flooding has also occurred in October 2005, November 2009 and in December 2015 due to Storm Frank. Most recently land and roads around Lindean were inundated from flood waters in January 2018 and February 2020.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2741	Avoid flood risk	Avoid inappropriate development that increases flood risk in Lindean
2742	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Lindean
2743	Reduce flood risk	Reduce the risk of river flooding from the Ettrick Water in Lindean

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood study (options appraisal) (Ref: 27401)	
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A flood study for Lindean is currently being progressed. A short-list of feasible options has been developed with work on-going to determine the best suite of flood risk management options for Lindean for current flood risk and in the future. The next stages of the study is to actively engage with stakeholders the residents of Lindean.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood scheme or works design (Ref: 27402)	
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The design phase of a flood protection scheme or works for Lindean should be progressed after the initial flood study has been completed. The design is likely to incorporate direct defences at Lindean Mill and Lindean Smithy Cottages. There should be consideration of the current and long term flood risk and how the flood protection scheme and area will adapt to changes in flood risk through development of an adaptation plan.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 27403)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should be carried out as part of the on-going flood study and should continue once the flood study is complete.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Flood warning maintenance (Ref: 27404)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Ettrick Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

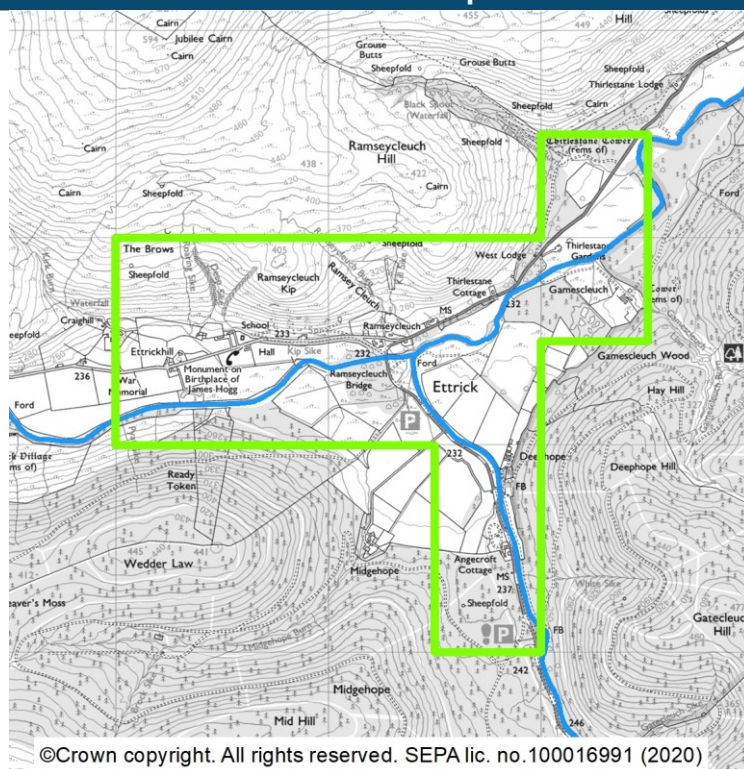
Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

Upper Ettrick (target area 278)

Summary

There are a number of small communities located on the banks of the Ettrick Water and Tima Water within the Scottish Borders referred to as Upper Ettrick communities. The main source of flooding in the Upper Ettrick is river flooding. Although the number of people and homes and businesses at risk is small (4 people and 10 homes and businesses), flooding can have a significant impact on these communities due to roads flooding and cutting off access routes.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by a flood study for the Ettrick Water and Tima Water. There is a long history of flooding in this target area with evidence of flooding leading to isolation of communities. The first flood was recorded in October 1977 when the B709 was flooded. A notable flood occurred in December 2015 during Storm Frank when heavy rain caused a landslide that led to flooding of 3 properties.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2781	Avoid flood risk	Avoid inappropriate development that increases flood risk in Upper Ettrick
2782	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Upper Ettrick

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood study (Ref: 27801)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A flood study is currently underway for the Ettrick Water and Tima Water. The study should continue as planned, improving understanding of the flooding mechanisms and appraising any options highlighted to manage flood risk.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised

Emergency plan (Ref: 27802)	
Action	The plan to coordinate responses to emergency incidents between organisations, including local authorities, the emergency services and SEPA, is to be maintained and executed as required.
Action detail	Scottish Borders Council should review and update as appropriate the Severe Weather Emergency Plan as new information becomes available. The local resilient communities road closure plan for the Ettrick Valley should be reviewed and updated as part of this process.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities.

Community engagement (Ref: 27803)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement is to inform the on-going flood study and assist the Upper Ettrick community.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 27804)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	The Ettrick and Yarrow Community Resilience Groups should continue their activities and be fully supported by Scottish Borders Council.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 27805)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Ettrick Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

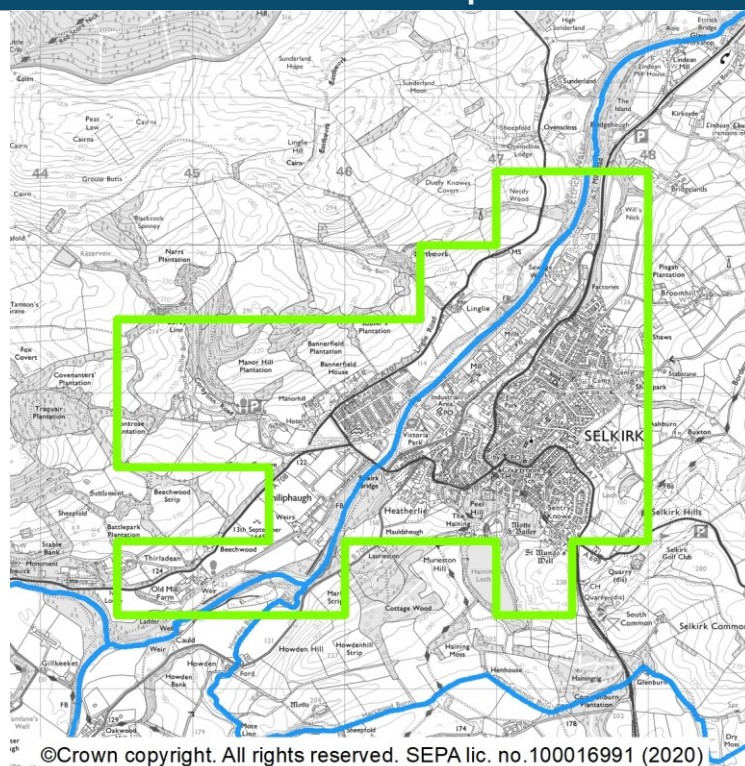
Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

Selkirk (target area 313)

Summary

Selkirk is a town in the Scottish Borders located on the banks of the Ettrick Water. The main source of flooding in Selkirk is river flooding. A flood protection scheme has recently been completed providing protection to 630 homes and businesses.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by the flood study in support of the Selkirk Flood Protection Scheme completed in 2017. There is a long history of flooding in this area with frequent flooding recorded. A notable flood occurred in May 2003 when flash flooding affected over 100 homes, a local primary school and caused significant damage to the Selkirk Rugby Club. A recent flood was recorded in December 2015, during which Storm Frank caused the Ettrick Water to overflow and flooded the surrounding area. A flood protection scheme for Selkirk was under construction at this time and no property flooding occurred. The scheme was completed in 2017 which now provides protection against river flooding.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
3131	Avoid flood risk	Avoid inappropriate development that increases flood risk in Selkirk
3132	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Selkirk Flood Protection Scheme
3133	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Selkirk

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood defence maintenance (Ref: 31301)	
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	SEPA should maintain the Ettrick Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 31302)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Ettrick Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/05 (Galashiels and Stow)

This area is designated as a Potentially Vulnerable Area due to flood risk to Galashiels, Melrose and Stow. The main sources of flood risk are from the Gala Water and the River Tweed in Galashiels, River Tweed in Melrose and Gala Water in Stow. There is also a risk of flooding from surface water. In 2014 the local authority completed a flood protection scheme that provides protection to Galashiels from river flooding. There is a long history of flooding in this area, with river flooding in Galashiels prior to the construction of the flood protection scheme.

There are 3 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

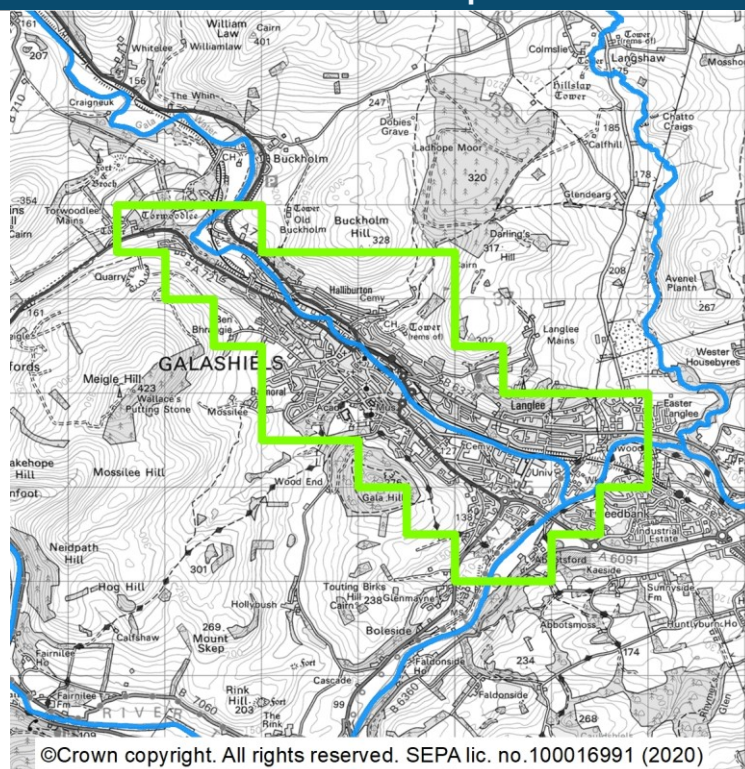
Galashiels	(target area 289)
Melrose	(target area 301)
Stow	(target area 316)

Galashiels (target area 289)

Summary

The town of Galashiels is located on the banks of the Gala Water within the Scottish Borders Council area. The main source of flooding is surface water, however there is also a risk from river flooding. There are approximately 2,300 people and 1,600 homes and businesses currently at risk of flooding. This is estimated to increase to 2,600 people and 1,800 homes and businesses by 2080 due to climate change. A flood protection scheme was completed in 2014 which provides protection against frequent floods.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by the flood study in support of the Galashiels Flood Protection Scheme completed in 2014. The national level assessment for surface water flooding is improved by an integrated catchment study, a surface water management plan and a sewer flood risk assessment. There is a long history of flooding in this area. A notable flood occurred in August 1948 when the Gala Water and Ladhope Burn overflowed resulting in widespread flooding throughout Galashiels with destruction of bridges. Up to 100 houses, 50 shops, the railway station and part of the railway track were affected by flooding and people were evacuated from their homes. A recent flood occurred in August 2013, when a number of homes were impacted by surface water flooding. The Galashiels Flood Protection Scheme provides protection against frequent floods.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2891	Avoid flood risk	Avoid inappropriate development that increases flood risk in Galashiels
2892	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Galashiels Flood Protection Scheme
2893	Improve data and understanding	Improve data and understanding of the performance of the Galashiels Flood Protection Scheme.
2894	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Galashiels
2895	Reduce flood risk	Reduce the risk of surface water flooding and the residual risk of river flooding from the Gala Water and the River Tweed in Galashiels.

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood study (Ref: 28901)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A natural flood management study should be completed as planned. This should assess if any catchment wide options can supplement and increase the level of protection currently offered by the Galashiels Flood Protection Scheme. The existing hydraulic model for Galashiels should be updated to current standards and include the assessment of Galashiels Flood Protection Scheme. Consideration for developing a hydraulic model upstream of Galashiels at Stow should also be considered.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 28902)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should also include the outcomes of the natural flood management study.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 28903)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	Responsible Authorities should continue to support active resilience groups in the town including The Galashiels Bakehouse Burn Flood Warning Group, Galashiels Waterways Group and Mill Lade Committee.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Flood defence maintenance (Ref: 28904)

Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Scottish Borders Council should continue to maintain the existing Galashiels Flood Protection Scheme. This includes continuous inspections of the scheme on a yearly basis and undertaking maintenance as required to ensure the scheme operates at peak efficiency
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 28905)

Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Gala Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 28906)

Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Tweed flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

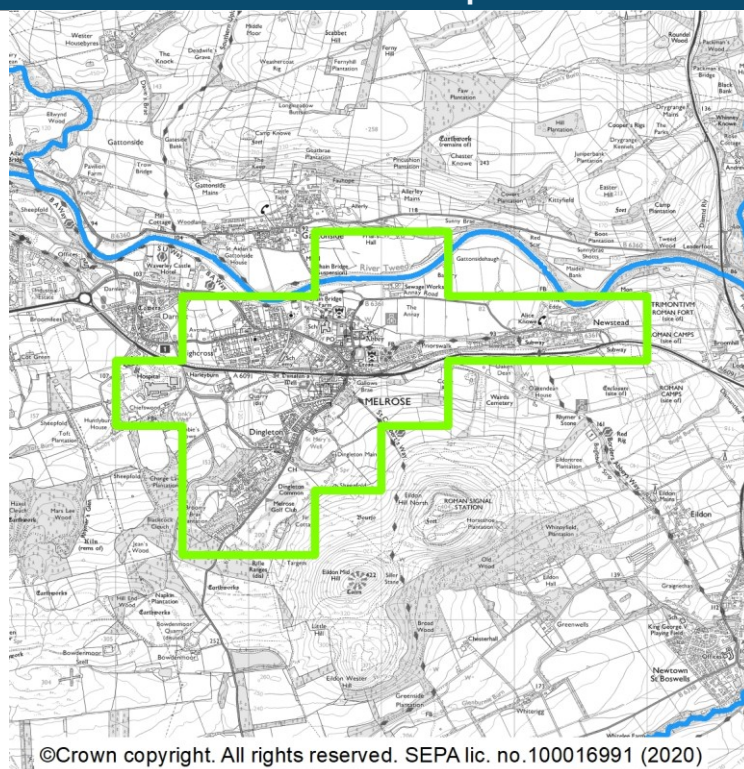
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Melrose (target area 301)

Summary

The town of Melrose is located on the southern bank of the River Tweed within the Scottish Borders. The main source of flooding in Melrose is surface water, however there is also a risk of river flooding. There are approximately 340 people and 260 homes and businesses at risk from flooding. This is likely to increase to 380 people and 310 homes and businesses by the 2080s due to climate change.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for surface water flooding is improved by a surface water management plan and a sewer flood risk assessment. There is a long history of flooding in this target area with frequent records of flooding. A notable flood occurred in July 2012 when 2 burns burst their banks following a short period of torrential rain. This flooded the surrounding area including 4 houses and a number of roads including an access road for the hospital.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
3011	Avoid flood risk	Avoid inappropriate development that increases flood risk in Melrose
3012	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Melrose
3013	Reduce flood risk	Reduce the risk of river flooding from the River Tweed and surface water flooding in Melrose.

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Community engagement (Ref: 30101)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should be developed based on existing knowledge and enhanced through future flood studies that are undertaken.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Flood warning maintenance (Ref: 30102)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Tweed flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Flood study (Ref: 30103)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A flood study should be undertaken to consider flood risk to Melrose from the River Tweed, small burns and from surface water. The study should include flood modelling and a high level appraisal of actions. A surface water management plan has been completed for the Melrose area, and has recommended a more detailed flood study for the Borders General Hospital area. The study should develop a more detailed understanding of flood risk and appraise potential options for managing flood risk.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

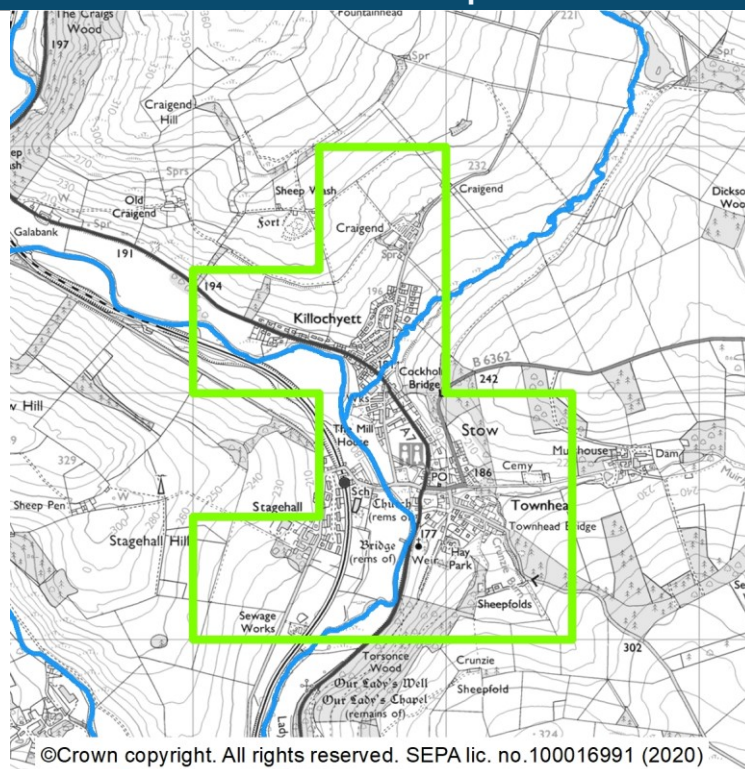
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Stow (target area 316)

Summary

Stow is a village located on the banks of Gala Water and Cockholm Burn in the Scottish Borders. The main source of flooding in Stow is river flooding. There are approximately 140 people and 80 homes and businesses currently at risk from flooding. Climate change is not expected to have a significant effect on the number of homes and businesses at risk.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources and this information has highlighted the risk of flooding in this target area. The national level assessment is the main source of flood risk information in this area. There is a history of flooding in this area. A notable flood occurred in October 1977 when the Gala Water overflowed and flooded 4 homes, a local football park and the bowling green. The most recent flood was recorded in September 2012, when flooding affected the local bowling green and businesses.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
3161	Avoid flood risk	Avoid inappropriate development that increases flood risk in Stow
3162	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Stow.
3163	Reduce flood risk	Reduce the risk of river flooding from the Gala Water and small watercourses in Stow

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood study (Ref: 31601)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	The natural flood management study for the Gala Water catchment also covers this area. Consideration for developing a hydraulic model upstream of Galashiels at Stow should also be considered.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 31603)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Gala Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Community resilience group (Ref: 31604)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	Scottish Borders Council should continue to support the Stow and Fountainhall Resilient Communities Group.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

	Flood study (Ref: 31602)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A flood study should be undertaken to consider flood risk in Stow. This study should include flood modelling and a high level assessment of options to manage flood risk.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/06 (Earlston)

This area is designated as a Potentially Vulnerable Area due to flood risk to Earlston. The main sources of flooding are the Leader Water and Turfford Burn. Flood protection scheme on the Turfford Burn provides some protection against flooding. This area has a long history of flooding, with a recent floods recorded from the Turfford Burn.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Earlston

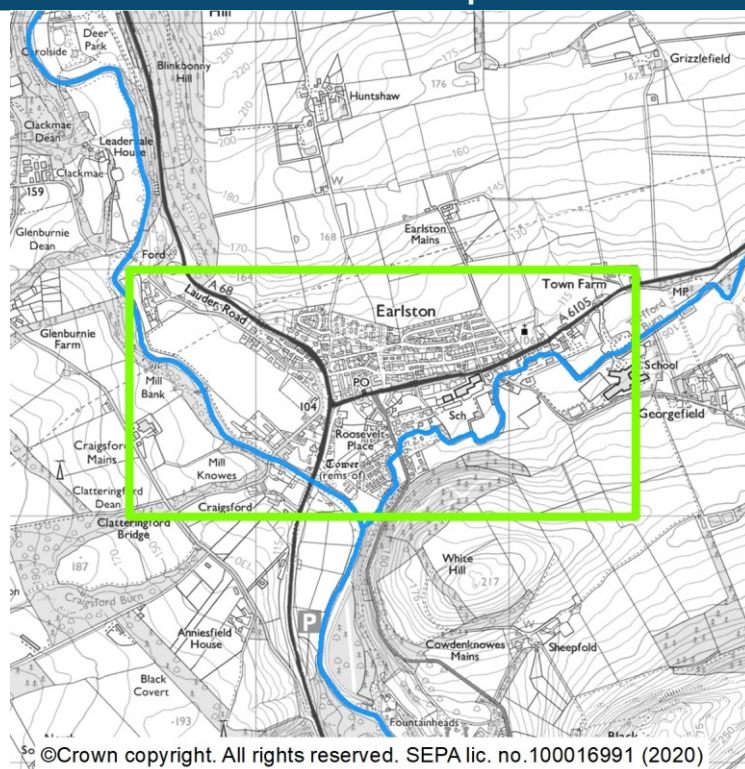
(target area 287)

Earlston (target area 287)

Summary

The town of Earlston is located on the banks of Leader Water and within the Scottish Borders Council area. The main source of flooding to Earlston is river flooding. The local authority has carried out a flood study in this area. The study showed that there are approximately 15 people and 10 homes and businesses at risk of flooding. This is estimated to increase to 40 people and 20 homes and businesses by the 2080s due to climate change.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by a flood study for Earlston completed in 2019. The national assessment for surface water flooding is improved by a sewer flood risk assessment. There is a long history of flooding in this area. A significant flood occurred in August 1948 when the Leader Water flooded the local mill and houses. Recently there was extensive flooding of Church Street in August and October 2019 due to a small unnamed burn coming out of bank and flowing down the road. The Turford Burn Flood Prevention Scheme provides some protection from flooding in the area.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2871	Avoid flood risk	Avoid inappropriate development that increases flood risk in Earlston
2872	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Turfford Burn Flood Protection Scheme
2873	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Earlston

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Community engagement (Ref: 28701)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	This should be further informed by the findings of the flood study.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Flood defence maintenance (Ref: 28702)	
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Scottish Borders Council should continue to maintain the existing Turfford Burn Flood Protection Scheme. This includes continuous inspections of the scheme on a yearly basis and undertaking maintenance as required to ensure the scheme operates at peak efficiency.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 28703)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Leader Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Community resilience group (Ref: 28706)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	Earlston Resilient Communities Group should continue to operate in the area. The flooding section of their resilience plan should be updated as appropriate when new information on managing flood risk become available. The Resilient Communities sandbag store in Earlston should continue to be maintained.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Property flood resilience scheme (Ref: 28704)	
Action	The proposed scheme to provide resilience measures against flooding for individual buildings is to be taken forward to help prevent water entering the property and to minimise flood damage.
Action detail	The Earlston Flood Study was carried out in 2018 and recommended property flood resilience measures as the preferred outcome for reducing the impact of flooding. This should be further investigated and property level surveys carried out as appropriate to determine what type of property level protection is required.
Coordination	Action delivery lead and coordination will be determined once the actions have been finalised.

Community flood alert (Ref: 28705)	
Action	A community river level alerting system is to be installed to provide information on the potential for localised flooding.
Action detail	There is no flood warning currently in place on the Turfford Burn. Community-based flood warning should be considered, particularly to assist with emergency procedures. Properties that could benefit from property resilience measures would also benefit from prior warning provided from measures such as this. Scottish Borders Council has an existing alarm system on the Turfford Burn that could be utilised for this purpose.
Coordination	Action delivery lead will be determined once the actions have been finalised. The action will be coordinated with Scottish Flood Forum, Scottish Borders Council and the community.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/07 (Coldstream)

This area is designated as a Potentially Vulnerable Area due to potential flood risk to Coldstream. The main sources of flooding are surface water and river flooding from Leet Water and River Tweed. Recent river flooding to roads and property has occurred in the area.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

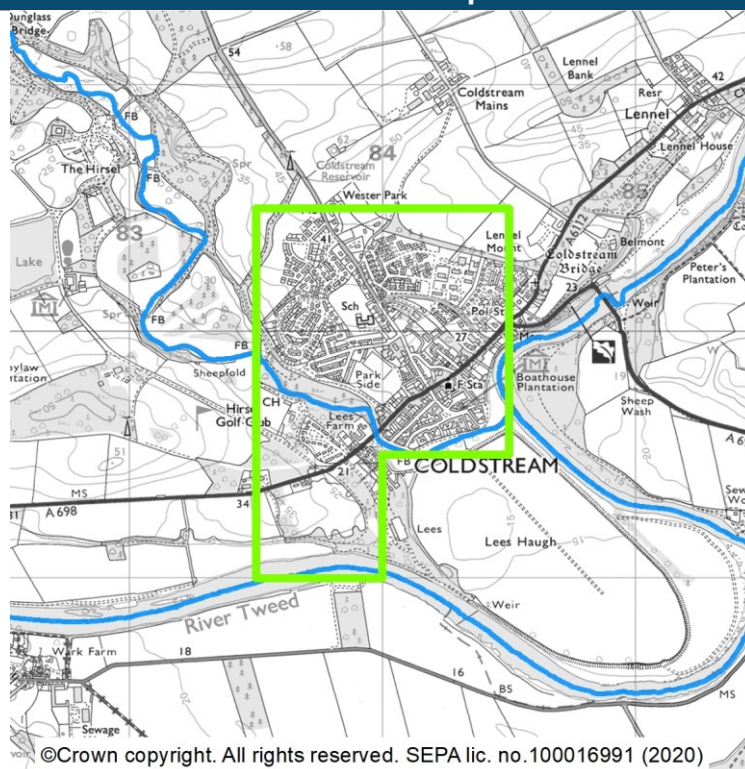
Coldstream (target area 285)

Coldstream (target area 285)

Summary

Coldstream is a town located on the banks of the River Tweed and Leet Water within the Scottish Borders Council area. The main source of flooding in Coldstream is river flooding from the River Tweed and Leet Water and there is some risk from surface water flooding. There is currently uncertainty over the level of risk in Coldstream and further work is required to improve understanding.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. There is currently uncertainty over the level of risk in Coldstream and further work is required to improve understanding. There is a long history of flooding in this area. In August 1948 the Leet Water and the River Tweed flooded, affecting roads, homes and businesses with some residents evacuated. This flood was the largest on record in the area. A recent flood was recorded in February 2020 during Storm Dennis with the Leet Water flooding the lower Duke Street area and Penittents Walk.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2851	Avoid flood risk	Avoid inappropriate development that increases flood risk in Coldstream
2852	Improve data and understanding	Improve data and understanding of surface water flooding in Coldstream
2853	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Coldstream

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood warning maintenance (Ref: 28501)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Tweed flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 28502)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Information gathered should be used to inform any future flood studies.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 28503)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	The Coldstream Community Resilience Group should continue with support from the Scottish Borders Council. The resilience plan should be updated as new information on flood risk becomes available.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Flood study (Ref: 28504)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A study for Coldstream should include flood modelling to improve understanding of flood risk in this area from all relevant sources. Flood risk should be quantified for a range of scenarios including the potential impacts of climate change. The interaction between surface water and river flooding should be assessed, along with risk from both the Leet Water and River Tweed.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/08 (Kelso)

This area is designated as a Potentially Vulnerable Area due to flood risk to Kelso. The main source of flooding is surface water and there is also flood risk from the River Tweed. This area has a history of flooding, with recent flooding of low-lying areas in February 2020 during Storm Ciara and in December 2015 during Storm Desmond.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Kelso

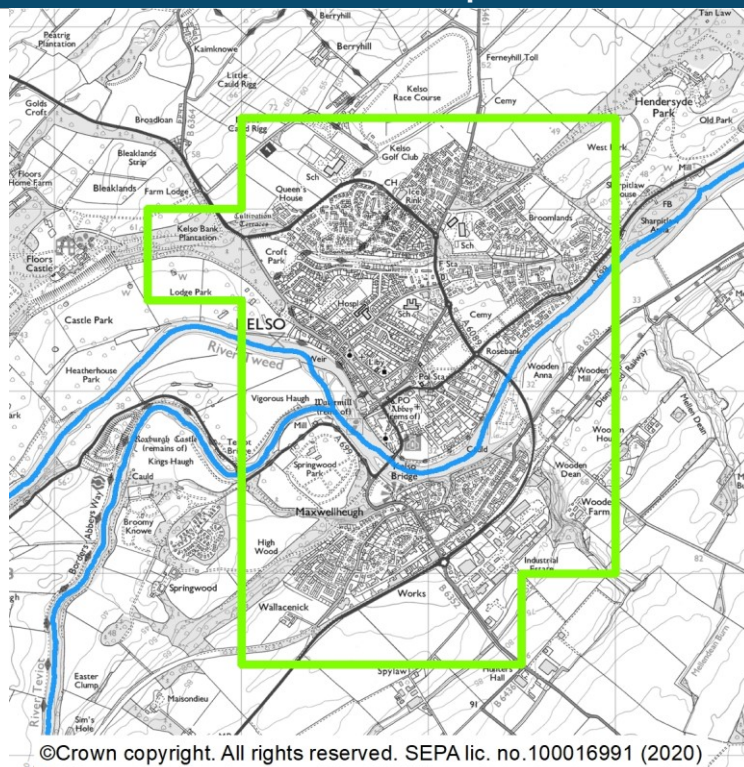
(target area 293)

Kelso (target area 293)

Summary

Kelso is located at the confluence of the Rivers Tweed and Teviot within the Scottish Borders Council area. The main source of flooding is surface water, but there is also some risk from the River Tweed and River Teviot. There are approximately 680 people and 380 homes and businesses currently at risk of flooding. This is estimated to increase to 1,000 people and 590 homes and businesses by the 2080s due to climate change.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is the main source of information for river flooding but is improved for surface water flooding by a sewer flood risk assessment. There is a long history of flooding in this area with infrequent but significant floods from the River Tweed and River Teviot. A notable flood occurred in August 1948 when the River Tweed rose by 5.2m causing significant flooding. Local roads and houses were completely flooded. More recently there was flooding in January 2018 and again in February 2020, during Storm Ciara, when the Rivers Teviot and Tweed flooded parks and roads.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2931	Avoid flood risk	Avoid inappropriate development that increases flood risk in Kelso
2932	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Kelso
2933	Reduce flood risk	Reduce the risk of surface water flooding in Kelso

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Surface water management plan (Ref: 29301)	
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A surface water management plan should be developed to improve understanding of surface water flood risk in Kelso. Current and long term flood risk should be considered and relevant high level actions appraised using the national guidance available. Any actions highlighted should consider the impacts of climate change and be included in an appropriate adaptation plan to address these risks in the future.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with Scottish Water and other actions in the area.

Community engagement (Ref: 29302)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should be further informed with the findings from the surface water management plan.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Flood warning maintenance (Ref: 29303)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Tweed flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/09 (Hawick)

This area is designated as a Potentially Vulnerable Area due to flood risk to Hawick. The main source of flooding is the River Teviot and its tributaries including the Slitrig Water. There is also a risk of flooding from surface water. There is a long history of flooding in this area, with recent floods recorded during Storm Ciara in February 2020, leading to the collapse of a property next to the River Teviot.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Hawick

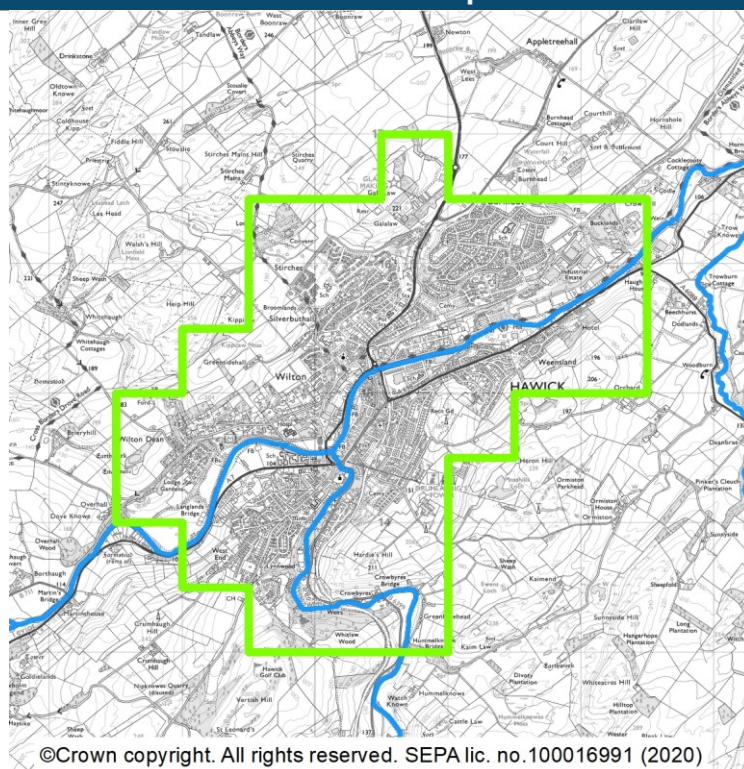
(target area 290)

Hawick (target area 290)

Summary

The town of Hawick is located in the Scottish Borders on the banks of the River Teviot. The main source of flooding in Hawick is river flooding which includes the River Teviot and its tributaries the Slitrig Water, Wilton Burn, Dean Burn and Boonraw Burn. There is also risk from surface water flooding. There are approximately 2,600 people and 1,600 homes and businesses currently at risk of flooding. This is likely to increase to 3,000 people and 1,900 homes and businesses by the 2080s due to climate change. A flood protection scheme for Hawick is currently under development.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by the flood study in support of the Hawick Flood Protection Scheme (2014) and the Hawick, Whitlaw and Crowbyres Flood Study (2019). The national assessment for surface water flooding is improved by a sewer flood risk assessment. There is a long history of flooding in this area. Large number of floods were recorded between 2002 and 2015. Recently, in February 2020 during Storm Ciara, part of a guesthouse collapsed into the River Teviot during its spate and during Storm Dennis in the same month the Slitrig Water flooded properties again in the Crowbyres Area.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2901	Avoid flood risk	Avoid inappropriate development that increases flood risk in Hawick
2902	Avoid flood risk	Avoid an increase in flood risk in Hawick by the appropriate protection, management and maintenance of the Hawick Flood Protection Scheme.
2903	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Hawick
2904	Reduce flood risk	Reduce the risk of surface water flooding and river flooding from the River Teviot and Slitrig Water in Hawick

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood study (Ref: 29001)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A natural flood management study should be carried out for Hawick. This should assess if any catchment wide options can supplement and increase the level of protection offered by the Hawick Flood Protection Scheme.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood scheme or works design (Ref: 29002)	
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A flood protection scheme has been recommended for the Crowbyres and Whitlaw areas of Hawick. Recommendations include structural elements, including flood defence wall and embankment (1 in 75 year and 1 in 200 year plus climate change standard of protection considered) and improved road drainage measures proposed for the B6399. The scheme should be progressed through outline and detailed design. There should be consideration of the current and long term flood risk and how the flood protection scheme and area will adapt to changes in flood risk through development of an adaptation plan.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood scheme or works implementation (Ref: 29003)	
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Construction of the Hawick Flood Protection Scheme should continue to its completion, providing a 1 in 75 year level of protection to homes and businesses in the centre of Hawick. The design of the new flood protection scheme should be considered in the development of an adaptation plan.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood defence maintenance (Ref: 29004)

Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Annual inspection and maintenance of the Hawick Flood Protection Scheme should start once the scheme has been completed.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Sewer flood risk assessment (Ref: 29005)

Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Hawick sewer catchment in this target area. This will help to improve knowledge and understanding of potential surface water flood risk. Funding for this action is secured through Scottish Water's strategic planning commitments.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Surface water management plan (Ref: 29006)

Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Scottish Borders Council should develop and implement a surface water management plan for Hawick. This should consider the results of Scottish Waters sewer flood risk assessment and should include a high level appraisal of actions to manage flood risk. The works carried out as part of Hawick Flood Protection Scheme should be considered. The impacts of climate change on flood risk should be assessed.
Coordination	Action delivery lead is Scottish Borders Council in coordination with Scottish Water and other actions in the area.

Community engagement (Ref: 29007)

Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement and awareness raising should be based on current and future flood risk, once flood risk management measures are in place.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 29008)

Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	The Hawick Flood Group and Hawick Resilience Group should continue to be supported by the Scottish Borders Council.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 29009)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Teviot Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/10 (Bonchester Bridge)

This area is designated as a Potentially Vulnerable Area due to flood risk to Bonchester Bridge. The main source of flooding is the Rule Water. There is a history of flooding in this area, with recent flooding recorded in February 2020.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

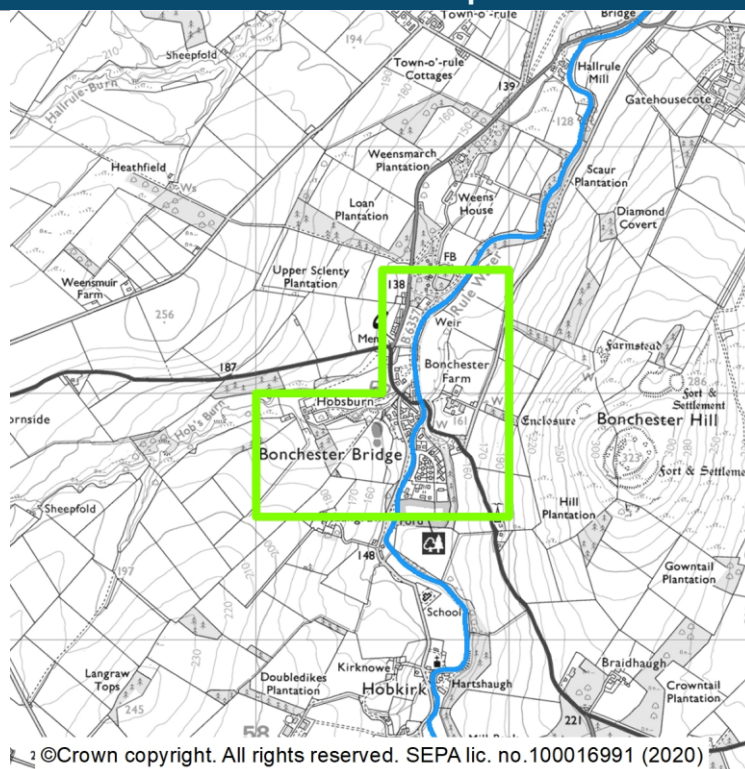
Bonchester Bridge (target area 276)

Bonchester Bridge (target area 276)

Summary

Bonchester Bridge is a village located on the banks of Rule Water in the Scottish Borders. The main source of flooding is river flooding. There are approximately 90 people and 50 homes and businesses currently at risk from flooding, which is a significant proportion of the community. This is likely to increase to 100 people and 60 properties by the 2080s due to climate change. There are community facilities and roads at risk from flooding.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources and this information has highlighted the risk of flooding in this target area. The national assessment is the main source of flood risk information in this area. There has been a number of recorded floods in the Bonchester Bridge area. A recent flood occurred in February 2020 as a result of Storm Dennis. Flooding from the Rule Water and the burn next to Forest Road resulted in 8 properties and 1 business flooding.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2761	Avoid flood risk	Avoid inappropriate development that increases flood risk in Bonchester Bridge
2762	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Bonchester Bridge
2763	Reduce flood risk	Reduce the risk of river flooding from the Rule Water in Bonchester Bridge

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Data collection (Ref: 27601)	
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	The Rule Water is an ungauged river. The feasibility of data collection and monitoring should be considered in order to gain better understanding of the river hydrology and flooding mechanisms.
Coordination	Action delivery lead and coordination will be determined once the actions have been finalised.

Flood study (Ref: 27602)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	The flood study should include flood modelling to quantify the risk of flooding from river and surface water sources, identifying all flooding mechanisms, and investigate a range of flood scenarios including the potential impacts of climate change. National guidance should be followed to assess any options highlighted as a potential flood risk management measure. The study should assess as appropriate the suitability of natural flood management including land management, runoff management, river restoration, existing and new woodland areas and floodplain storage if identified as opportunities.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 27603)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement will help address current flood risk and assist with future flood studies.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 27604)

Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	The existing Hobkirk Resilient Communities Group covers Bonchester Bridge.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Community flood alert (Ref: 27605)

Action	A community river level alerting system is to be installed to provide information on the potential for localised flooding.
Action detail	The local authority, in association with SEPA and the resilient communities group, should consider the feasibility of installing a community alerting system. Installation of river level gauging would be essential for the alerting system.
Coordination	Action delivery lead will be determined once the actions have been finalised. The action will be coordinated with Scottish Flood Forum, Scottish Borders Council and the community.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/11 (Jedburgh)

This area is designated as a Potentially Vulnerable Area due to flood risk to Jedburgh. The main sources of flooding is the Jed Water and Skiprunning Burn, and there is also risk from surface water. The local authority completed a flood protection scheme for the Skiprunning Burn in Jedburgh in 2016. There is recent history of flooding from the Jed Water and surface water.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Jedburgh

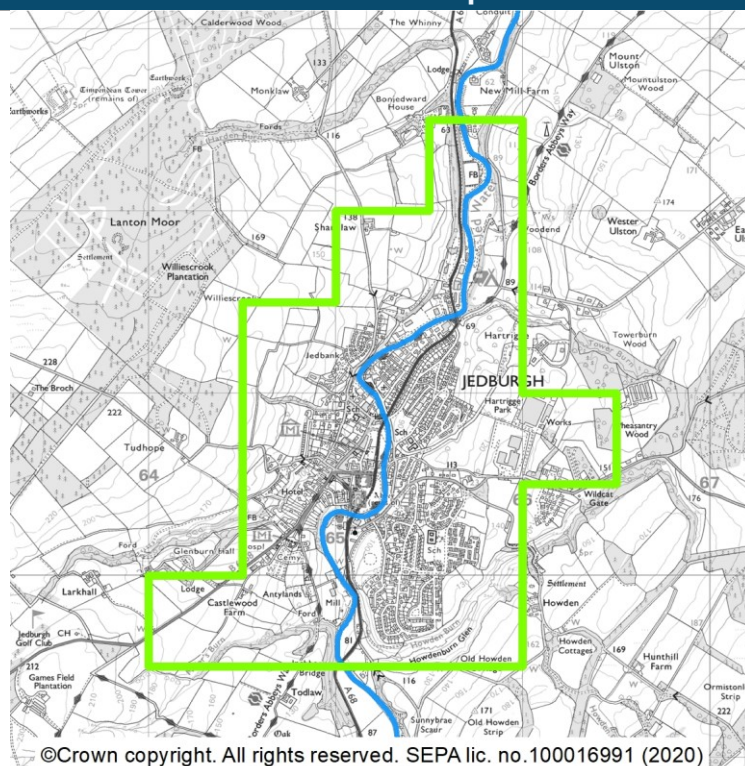
(target area 292)

Jedburgh (target area 292)

Summary

Jedburgh is located on the banks of Jed Water in the Scottish Borders. The main source of flooding is river flooding, however there is also risk from surface water. The local authority has completed a flood protection scheme on the Skiprunning Burn in Jedburgh. There are approximately 690 people and 510 homes and businesses at risk from flooding. This is likely to increase to 830 people and 590 homes and businesses by the 2080s due to climate change. There are a number of roads at risk of flooding, which may cause travel disruption.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment for river flooding is improved by the flood study in support of Jedburgh (Skiprunning Burn) Flood Protection Scheme completed in 2016. There is a long history of flooding in this area. A notable flood occurred in January 2016 with flooding to a number of homes and businesses in Bongate Industrial Estate and Riverside workshops. A flood protection scheme for the Skiprunning Burn has since been constructed. Recent floods occurred during Storm Ciara and Storm Dennis in February 2020 when the Jed Water burst its banks, flooding roads and affecting some properties.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
2921	Avoid flood risk	Avoid inappropriate development that increases flood risk in Jedburgh
2922	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of existing flood defences along the Jed Water including the Jed Water Flood Protection Scheme and the Jedburgh (Skiprunning Burn) Flood Protection Scheme
2923	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Jedburgh
2924	Reduce flood risk	Reduce the risk of river flooding and surface water flooding from the Jed Water and Skiprunning Burn in Jedburgh

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Flood study (Ref: 29201)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	The flood study is to be carried out to include flood modelling to quantify the flood risk from river and surface water sources, identifying all flooding mechanisms. The study should investigate a range of flood scenarios including the potential impacts of climate change. National guidance should be followed to assess any options highlighted as a potential flood risk management measure. The study should assess as appropriate the suitability of natural flood management measures. Development of an adaptation plan for managing flood risk in Jedburgh should also be undertaken.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Surface water management plan (Ref: 29202)	
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A surface water management plan should be developed to improve understanding of surface water flood risk in Jedburgh. Current and long term flood risk should be considered and relevant high level actions appraised using the National Guidance available. Any actions highlighted should consider the impacts of climate change and be included in an appropriate adaptation plan to address these risks in the future.
Coordination	Action delivery lead is Scottish Borders Council in coordination with Scottish Water and other actions in the area.

Community engagement (Ref: 29203)

Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should focus on current flood risk and should assist with any flood study that is undertaken.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 29204)

Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	Scottish Borders Council should continue to support the Jedburgh Community Resilience Group.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Flood defence maintenance (Ref: 29205)

Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Maintenance of the existing Jed Water Flood Protection Scheme and the Jedburgh (Skiprunny Burn) Flood Protection Scheme should continue. The flood study should take into consideration the presence of these existing flood schemes when assessing the flood risk.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised.

Flood warning maintenance (Ref: 29206)

Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Jed Water flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

02/13/12 (Bowmont Valley)

This area is designated as a Potentially Vulnerable Area due to flood risk to remote communities in the Bowmont Valley. The main source of flooding is the Bowmont Water which is made worse due to significant erosion issues in the valley. There is potential for communities to become isolated due to flooding of access roads. Several floods have occurred in the valley, with records of flooding to properties and damage to the road.

There is 1 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

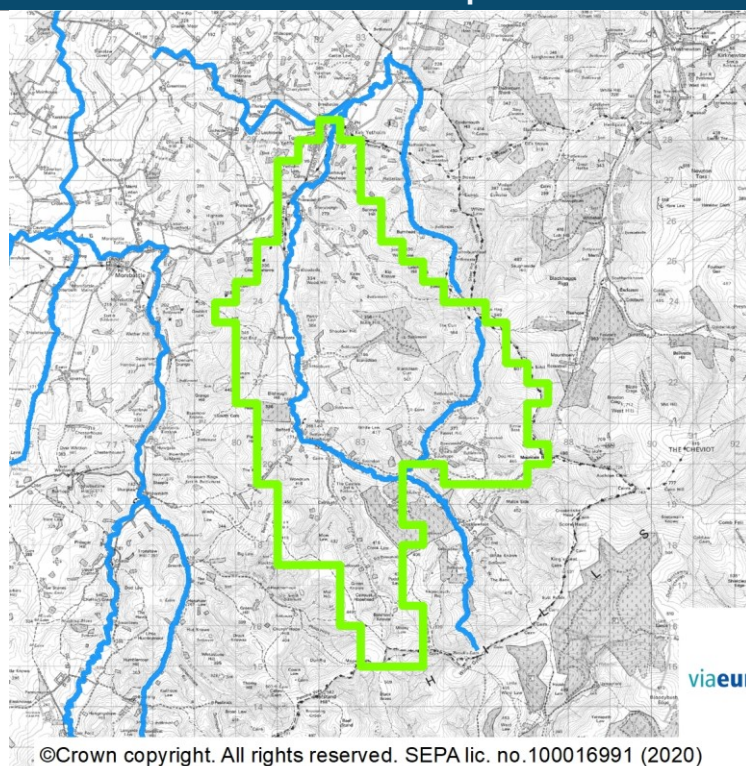
Bowmont Valley (target area 326)

Bowmont Valley (target area 326)

Summary

The Bowmont Valley is located within the Scottish Borders. There are a number of small settlements located across the valley. The main source of flooding in the Bowmont Valley is river flooding. These issues are made more significant because of the dynamic nature of the river system and erosion. There are approximately 30 people and 50 homes and businesses at risk from flooding. The community is likely to be susceptible to the impacts of climate change on flood risk and erosion in the catchment.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources and this information has highlighted the risk of flooding in this target area. The national level assessment is the main source of flood risk information in this area. There are records of flooding and erosion in this area. Significant flooding occurred in both September 2008 and July 2009. In 2008, several houses and roads were affected, the Bowmont Valley flooding several houses and damaging roads and bridges. There was also extensive erosion and landslips which affected the valley. In September 2009, several houses were flooded and over 40 homes left without electricity. Both floods had major impacts on the agricultural industry in the area. A recent flood occurred in February 2020 when the river breached its banks, flooding the road and nearby land. The fire brigade had to rescue residents from their houses in Duncanhaugh.

What are the objectives for the area?

In each target area, SEPA and the responsible authorities have set objectives for the management of flood risk. In some locations, the objectives provide a short-term direction that will be reviewed and updated when more information is available. In others they provide a long-term direction for the management of flooding within a community. The objectives along with the current understanding of flood risk help to identify the actions that are required in the short and long term. It may take several years or multiple 6 year cycles to achieve the identified objectives, but they set a common goal for multiple agencies. The following package of objectives have been established for this area. The objectives must be considered alongside national principles to manage flood risk. These include:

- Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.
- Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.
- Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
3261	Avoid flood risk	Avoid inappropriate development that increases flood risk in the Bowmont Valley.
3262	Improve data and understanding	Improve data and understanding of river flooding and erosion in the Bowmont Valley
3263	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in the Bowmont Valley communities

What actions are proposed for this area?

This section provides information on the draft proposed actions for this target area. The proposed actions take account of the understanding of flood risk and the package of objectives set for the area. Actions will be coordinated to achieve maximum benefit; this will be determined once the actions have been finalised. The proposed actions are draft for consultation and are provided for comment. Your comments will help shape future flood risk management. The delivery of the proposed actions is subject to available funding and resources.

Actions proposed to start before June 2028

Data collection (Ref: 32601)	
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	Further data collection and monitoring is needed in this area to improve certainty in hydrology data and mechanisms of both flooding and erosion. A review may be required to assess the need for rain and river gauges. Post flood event surveys may be required to collect data on flooding and erosion mechanisms, risk and damage caused.
Coordination	Action delivery lead and coordination will be determined once the actions have been finalised.

Community engagement (Ref: 32602)	
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community engagement should improve current knowledge and assist with future flood studies.
Coordination	Action delivery lead is Scottish Borders Council. Action will be coordinated with the responsible authorities, Scottish Flood Forum and other actions in the area.

Community resilience group (Ref: 32603)	
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	The Yetholm and District Resilient Communities Group and the Kalewater Resilient Communities Group are active in this area. These groups should continue to be supported by the local authority and others as necessary.
Coordination	Action delivery leads are Scottish Borders Council and the community. Coordination will be determined once the actions have been finalised.

Flood warning scoping (Ref: 32605)	
Action	The potential to provide a new flood warning scheme is to be considered by SEPA. Flood warnings are only effective where it is possible to send a warning message with sufficient time to allow communities to take appropriate actions before flooding occurs.
Action detail	Scoping for a river flood warning scheme will be carried out in Bowmont Valley.
Coordination	Action delivery lead is SEPA and coordination will be determined once the action has been finalised.

Actions proposed after June 2028

The following actions are proposed to take place after June 2028. These will be reviewed in 2026, considering added information at that time, to ensure they are still the most appropriate actions for the community.

Flood study (Ref: 32604)	
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	The flood study should consider all relevant sources of flooding, including the interaction between river and surface water flooding, and investigate a range of flood scenarios including the potential impacts of climate change. The study should also consider the impacts of erosion and sediment transportation management in the catchment.
Coordination	Action delivery lead is Scottish Borders Council and coordination will be determined once the actions have been finalised

SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, and that critical flood risk information is developed and updated for all areas. A description of these actions is included in the Local Plan District section at the start of this document.

What are the opportunities for joint working?

Working in partnership is at the heart of flood risk management, responsible authorities and SEPA regularly work together in all areas to improve the coordination of flood management. Working across organisations and groups contributes to sustainable ways of managing current and future flood risk in a community. The potential for joint working will be further explored following the consultation feedback.

Flood Risk Management Glossary

July 2021



Term	Definition
Accretion	Accumulation of sediment.
Actions	Activities undertaken to reduce the impact of flooding. Actions describe where and how flood risk will be managed. These actions have been set by SEPA and agreed with flood risk management authorities. The actions presented in the consultation are draft and will be finalised after the consultation. Selection of actions to deliver the agreed objectives has been based on a detailed assessment and comparison of economic, social and environmental criteria.
Annual Average Damages (AAD)	Depending on its size or severity each flood will cause a different amount of damage to a given area. Annual Average Damages are the theoretical average economic damages caused by flooding when considered over a very long period of time. It does not mean that damage will occur every year: in many years there will be no damages, in some years minor damages and in a few years major damages may occur. High likelihood events, which occur more regularly, contribute proportionally more to AADs than rarer events. Within the flood risk management plans AADs incorporate economic damages to the following receptors: residential properties, non-residential properties, vehicles, emergency services, agriculture and roads. They have been calculated based on the principles set out in the Flood Hazard Research Centre Multi-Coloured Handbook (2010).
Appraisal	Appraisal is the process of defining objectives, examining options and weighing up costs, benefits, risks and uncertainties before a decision is made. The flood risk management plans appraisal method is designed to set objectives and identify the most sustainable combination of actions to tackle flooding from rivers, the sea and surface water.
Awareness raising	Public awareness, participation and community support are essential components of sustainable flood risk management. SEPA and the responsible authorities have a duty to raise public awareness of flood risk. This is undertaken both individually and collaboratively by a range of organisations. Improved awareness of flood risk and actions that prepare individuals, homes and businesses for flooding can reduce overall impact.
Bathing waters	Bathing waters are classed as protected areas under Annex IV of the Water Framework Directive (WFD). There are 84 designated bathing waters in Scotland.

Term	Definition
Benefit cost ratio (BCR)	A benefit cost ratio summarises the overall value for money of an action or project. It is expressed as the ratio of benefits to costs (both expressed as present value monetary values). A ratio of greater than 1:1 indicates that the economic benefits associated with an action are greater than the economic costs of implementation; therefore this is taken as the threshold of economic viability. It should be acknowledged that it is not always possible to accurately estimate economic values for all elements of benefit, and BCR is just one of a number of techniques used in appraisal.
Blue infrastructure	Blue infrastructure is often complementary to 'green infrastructure' and includes sustainable drainage systems, swales (shallow, broad and vegetated channels designed to store and/or convey runoff and remove pollutants), wetlands, rivers, canals (and their banks) and all watercourses.
Business and services	Properties that are not used for people to live in, such as shops or other public, commercial or industrial buildings.
Catchment	All the land drained by a river and its tributaries.
Category 1 and 2 responders (Cat 1 / 2)	Category 1 and 2 Responders are defined as part of the Civil Contingencies Act 2004 which seeks to minimise disruption in the event of an emergency. Category 1 Responders are 'core' responders: local authorities, police, fire and rescue services, ambulance service, NHS health boards, SEPA and the Maritime and Coastguard Agency. Category 2 Responders are key co-operating responders in support of Category 1 Responders. These include gas and electricity companies, rail and air transport operators, harbour authorities, telecommunications providers, Scottish Water, the Health and Safety Executive and NHS National Services Scotland.
Channel improvement	Where work has been carried out on the river's channel allowing an increase in the volume of water it can carry.
Characterisation	Provides a description of the natural characteristics of catchments, coastlines and urban areas in terms of hydrology, geomorphology, topography and land use. It also includes the characterisation of existing levels of flood risk and existing flood risk management activity.
Coastal flooding	Flooding that results from high sea levels or a combination of high sea levels and stormy conditions. The term coastal flooding is used under the Flood Risk Management (Scotland) Act 2009, but in some areas it is also referred to as tidal flooding and covers areas such as estuaries and river channels that are influenced by tidal flows.
Combined sewer	Combined sewers transport sewage from homes and industry as well as carrying surface water runoff from gutters, drains and some highways. Heavy or prolonged rainfall can rapidly increase the flow in a combined sewer until the amount of water exceeds sewer capacity.
Combined sewer (overflow) (CSO)	Combined sewer overflows are purposely designed structures to ensure any excess water from sewerage systems is discharged in a controlled way and at a specific managed location.

Term	Definition
Community facility	Within the flood risk management plans this term includes: Emergency Services (Police, Fire, Ambulance, Coastguard, and Mountain Rescue) Educational Buildings (crèche, nursery, primary, secondary, further, higher and special education premises) Healthcare facilities: hospitals, health centres and residential care homes.
Community flood action groups	Community flood action groups are community based resilience groups which, on behalf of local residents and business, help to prepare for and minimise the effects of flooding. They reflect the interests of their local communities and may differ in composition and remit. There are over 60 groups already established in Scotland. The Scottish Flood Forum provides support for both new and existing groups.
Confluence	Where two or more rivers meet.
Conveyance	Conveyance is a measure of the carrying capacity of a watercourse. Increasing conveyance enables flow to pass more rapidly and reducing conveyance slows flow down. Both actions can be effective in managing flood risk depending on local conditions.
Cross Border Advisory Group (CBAG)	The Cross Border Advisory Group is a statutory group made up of representatives from the Environment Agency, SEPA, Scottish Water and the four lead local flood authorities located within the Solway Tweed River Basin District.
Cultural heritage site	Historic Environment Scotland maintains lists of buildings of special architectural or historic interest; these buildings are referred to as 'listed buildings'. The highest level of designation is a World Heritage Site. Other designations included in this assessment are scheduled monuments, gardens and designed landscapes, and battlefields.
Culvert	A pipe, channel or tunnel used for the conveyance of a watercourse or surface drainage water under a road, railway, canal or other obstacle.
Damages	<p>Flood damages are categorised as direct or indirect i.e. as a result of the flood water itself, or subsequent knock on effects. Damage to buildings and contents caused by flood water are an example of direct damages, whilst loss of industrial production, travel disruption or stress and anxiety are indirect. Some damages can be quantified in monetary terms, and others can only be described.</p> <p>The potential damages avoided by implementation of a flood risk management action are commonly referred to as the benefits of that action. When comparing the effectiveness of different actions, it is useful to consider estimated damages and damages avoided across the lifespan of the action. Within the flood risk management plans, a 100 year appraisal period has been used as standard. This allows costs, damages and benefits across this time frame to be compared in present value terms.</p> <p>See also 'Annual Average Damages'</p>

Demountable defences	A temporary flood barrier is one that is only installed when the need arises, that is, when flooding is forecast. A demountable flood defence is a particular type of temporary defence that requires built-in parts and therefore can only be deployed in one specific location.
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Term	Definition
Deposition	A natural process leading to an accumulation of sediment on a river bed, floodplain or coastline.
Economic Impact	An assessment of the economic value of the positive and negative effects of flooding and/or the actions taken to manage floods.
Embankment	Flood embankments are engineered earthfill structures designed to contain high river levels or protect against coastal flooding. They are commonly grass-covered, but may need additional protection against erosion by swiftly flowing water, waves or overtopping.
Emergency plans / response	Emergency response plans are applicable for all types of flooding. They set out the steps to be taken during flooding in order to maximise safety and minimise impacts where possible. Under the Civil Contingencies Act, Category 1 Responders have a duty to maintain emergency plans. Emergency plans may also be prepared by individuals, businesses, organisations or communities.
Environmental Impact	A change in the environment as a result of an action or activity. Impacts can be positive or negative and may vary in significance, scale and duration.
Environmental Impact Assessment (EIA)	Environmental Impact Assessment (EIA) is a process which identifies the potential environmental impacts, both negative and positive, of a proposal.
Environmental sites / environmental designated areas/ environmentally designated sites	Areas formally designated for environmental importance, such as Sites of Special Scientific Interest (SSSI) Special Protection Area (SPA) or Special Areas of Conservation (SAC).
Episodic erosion	Erosion induced by a single event, such as a storm.
Erosion	A natural process leading to the removal of sediment from a river bed, bank, floodplain or coastline.
Estuarine surge attenuation	A reduction in the wave energy caused by storm surge. Breakwaters (barriers built out into the sea to protect a coast or harbour from the force of waves) or habitats such as saltmarsh can slow down and reduce the inland impact of storm surges (the rising of the sea due to wind and atmospheric pressure changes associated with storms), thereby reducing coastal flood risk.
Estuary	A coastal body of water usually found where a river meets the sea; the part of the river that is affected by tides.
Fault (fault line)	A break or fracture in the earth's crust as a result of the displacement of one side with respect to the other. In Scotland the Great Glen Fault is a major geological fault line cutting diagonally across the Highlands from Fort William to Inverness.

Flash flood	A flood that occurs a short period of time after high intensity rainfall or a sudden snow melt. A sudden increase in the level and velocity of the water body is often characteristic of these events, leaving a short time for warning or actions.
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Term	Definition
Flashy watercourse	A 'flashy' river or watercourse has a short lag time (the delay between peak rainfall intensity and peak river discharge), high peak discharge, and quickly returns to average flow. Rivers with these characteristics can be prone to flooding and leave a short time for warning or actions.
Flood	In the terms of the Flood Risk Management Act, 'flood' means a temporary covering by water, from any source, of land not normally covered by water. This does not include a flood solely from a sewerage system, as a result of normal weather or infrastructure drainage. A flood can cause significant adverse impacts on people, property and the environment.
Flood bund	A constructed retaining wall, embankment or dyke designed to protect against flooding to a specified standard of protection.
Flood defence	Infrastructure, such as flood walls and embankments, intended to protect an area against flooding, to a specified standard of protection.
Flood extent	The area that has been affected by flooding, or is at risk of flooding from one or more sources for a particular likelihood.
Flood forecasting	SEPA operates a network of over 250 rainfall, river and coastal monitoring stations throughout Scotland that generate data 24 hours a day. This hydrological information is combined with meteorological information from the Met Office. A team of experts then predict the likelihood and timing of river, coastal and surface water flooding. This joint initiative between SEPA and the Met Office forms the Scottish Flood Forecasting Service.
Flood frequency	The probability that a particular size/severity of flood will occur in a given year (see likelihood).
Flood gate	An adjustable, sometimes temporary, barrier used as a flood defence to control the flow of water within a water system or during a flood. Flood gates can also be part of operational flood defences or protect individual buildings or sites.
Flood guard	Flood guards cover a variety of types of door and window barriers that can be fitted to individual properties and operated by the owners / occupiers prior to a flood event. They act as a physical barrier to water entering the property and can provide protection against frequent and relatively shallow flooding.
Flood hazard	In terms of the Flood Risk Management Act, hazard refers to the characteristics (extent, depth, velocity) of a flood.
Flood hazard map	Flood hazard maps are required by the Flood Risk Management Act to show information that describes the nature of a flood in terms of the source, extent, water level or depth and, where appropriate, velocity of water. Flood hazard and risk maps are referred to collectively as flood maps and are available on the SEPA website.

Flood Prevention Scheme / Flood Protection Scheme (FPS)	A flood protection scheme, as defined by the Flood Risk Management Act, is a scheme by a local authority for the management of flood risk within the authority area. This includes defence measures (flood prevention schemes) formerly promoted under the Flood Prevention (Scotland) Act 1961.
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Term	Definition
Flood Prevention (Scotland) Act 1961	The Flood Prevention (Scotland) Act 1961 gave local authorities discretionary powers to make and build flood prevention schemes. It was superseded by the Flood Risk Management (Scotland) Act 2009.
Flood protection study	Flood protection studies aim to refine understanding of the hazard and risk associated with flooding in a particular area, catchment or coastline. They will involve detailed assessment of flood hazard and / or risk and may develop options for managing flood risk.
Flood protection works	Flood protection works can include the same flood defence measures that would make up a formal Flood Protection Scheme but without the legal process, protections and requirements that would come by delivering the works as a scheme.
Flood risk	A measure of the combination of the likelihood of flooding occurring and the associated impacts on people, the economy and the environment.
Flood Risk Assessment	Flood Risk Assessments are detailed studies of an area where flood risk may be present. These are often used to inform planning decisions, may help to develop flood schemes and have also contributed to the National Flood Risk Assessment.
Flood Risk Management (Scotland) Act 2009 (FRM Act)	The flood risk management legislation for Scotland. It transposes the EC Floods Directive into Scots Law and aims to reduce the adverse consequences of flooding on communities, the environment, cultural heritage and economic activity.
Flood risk management cycle	Under the Flood Risk Management Act, flood risk management planning is undertaken in six year cycles. The first planning cycle is 2015 – 2021. The first delivery cycle is lagged by approximately 6 months and is from 2016-2022.
Flood Risk Management Local Advisory Groups	Flood risk management local advisory groups are stakeholder groups convened to advise SEPA and lead local authorities in the preparation of flood risk management plans. SEPA and lead local authorities must have regard to the advice they provide.
Flood Risk Management Plan (FRM Plans)	A term used in the Flood Risk Management Act. Flood risk management plans set out a long-term vision for the overall management of flood risk. They contain a summary of flood risk in each Local Plan District, together with information on catchment characteristics and a summary of objectives and actions within Potentially Vulnerable Areas.
Flood Risk Management Strategy (FRM Strategy)	The term used for the first set of flood risk management plans, which were published in December 2015. These are now referred to as the flood risk management plans to keep consistency with the Flood Risk Management Act and other areas of the UK.

Flood risk map	Complements the flood hazard maps published on the SEPA website providing detail on the impacts of flooding on people, the economy and the environment. Flood hazard and risk maps are referred to collectively as flood maps and are available on the SEPA website.
Flood wall	A flood defence feature used to defend an area from flood water to a specified standard of protection.
Flood Warning Target Area (FWTA)	A Flood Warning target area is where SEPA operates a formal Flood Monitoring Scheme to issue targeted flood warning messages for properties located in the area.

Term	Definition
Flood warning scheme	A flood warning scheme is the network of monitoring on a coastal stretch or river, which provides SEPA with the ability to issue flood warnings.
Floods directive	European Directive 2007/60/EC on the Assessment and Management of Flood Risks builds on and is closely related to the Water Framework Directive (see river basin management planning). It was transposed into Scots Law by the Flood Risk Management (Scotland) Act 2009. The Directive requires Member States to assess if all watercourses and coastlines are at risk from flooding, to map the flood extent, assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk.
Floodplain	Area of land that borders a watercourse, an estuary or the sea, over which water flows in time of flood, or would flow but for the presence of flood defences and other structures where they exist.
Floodplain storage	Floodplains naturally store water during high flows. Storage can be increased through natural or man-made features to increase flood depth or slow flows in order to reduce flooding elsewhere.
Fluvial flooding	Flooding from a river or other watercourse.
Gabion	A metal cage filled with rocks often used in river bank protection.
Green infrastructure	The European Commission defines green infrastructure as “the use of ecosystems, green spaces and water in strategic land use planning to deliver environmental and quality of life benefits. It includes parks, open spaces, playing fields, woodlands, wetlands, road verges, allotments and private gardens. Green infrastructure can contribute to climate change mitigation and adaptation, natural disaster risk mitigation, protection against flooding and erosion as well as biodiversity conservation.” See also ‘blue infrastructure’.
Groundwater flooding	This type of flooding is caused by water rising up from underlying rocks or flowing from springs. In Scotland groundwater is generally a contributing factor to flooding rather than the primary source.
Integrated catchment study (ICS)	In urban areas, the causes of flooding are complex because of the interactions between rivers, surface water drainage and combined sewer systems and tidal waters. Scottish Water works with SEPA and local authorities to assess these interactions through detailed studies.

Land use planning (LUP)	The process undertaken by public authorities to identify, evaluate and decide on different options for the use of land, including consideration of long term economic, social and environmental objectives and the implications for different communities and interest groups.
Lead local authority	A local authority responsible for leading the production, consultation, publication and review of a Local flood risk management plan.

Term	Definition
Likelihood of flooding	<p>The chance of flooding occurring.</p> <p>High likelihood: A flood event is likely in the defined area on average once in every ten years (1:10). Or a 10% chance of happening in any one year.</p> <p>Medium likelihood: A flood event is likely in the defined area on average once in every two hundred years (1:200). Or a 0.5% chance of happening in any one year.</p> <p>Low likelihood: A flood event is likely in the defined area on average once in every thousand years (1:1000). Or a 0.1% chance of happening in any one year.</p>
Local Flood Risk Management Plans (Local FRM Plan)	Local flood risk management plans, produced by lead local authorities, will take forward the objectives and actions set out in flood risk management plans. They will provide detail on the funding, timeline of delivery, arrangements and co-ordination of actions at the local level during each six year, flood risk management planning cycle.
Local Nature Reserve (LNR)	A Local Nature Reserve is a protected area of land designated by a local authority because of its local special natural interest and / or educational value. Local authorities select and designate local nature reserves using their powers under the National Parks and Access to the Countryside Act 1949.
Local Plan District	Geographical areas for the purposes of flood risk management planning. There are 14 Local Plan Districts (LPDs) in Scotland.
Local Plan District Partnerships	Each LPD has established a local partnership comprised of local authorities, SEPA and Scottish Water and others as appropriate. These partnerships are distinct from the flood risk management plans local advisory groups and they retain clear responsibility for delivery of the flood risk management actions set out in the Local flood risk management plans. It is the local partnership that makes decisions and supports the delivery of these plans.
Maintenance	Sections 18 and 59 of the Flood Risk Management (Scotland) Act 2009 put duties of watercourse inspection, clearance and repair on local authorities. In addition, local authorities may also be responsible for maintenance of existing flood protection schemes or defences.
Montane habitat	This habitat encompasses a range of natural or near-natural vegetation occurring in the montane zone, lying above or beyond the natural tree-line.

National Flood Management Advisory Group (NFMAG)	The National Flood Management Advisory Group provides advice and support to SEPA and, where required, Scottish Water, local authorities and other responsible authorities on the production of flood risk management plans and Local flood risk management plans.
National Flood Risk Assessment (NFRA)	A national analysis of flood risk from all sources of flooding which also considers climate change impacts. First published in December 2011 this provides the information required to undertake a strategic approach to flood management that identifies areas at flood risk that require further appraisal. The NFRA was reviewed and updated for the second cycle of flood risk management planning in 2018.

Term	Definition
Natural flood management (NFM)	A set of flood management techniques that aim to work with natural processes (or nature) to manage flood risk.
Non-residential properties	Properties that are not used for people to live in, such as shops or other public, commercial or industrial buildings.
Objectives	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.
One in 200 year flood	See 'likelihood of flooding' and 'return period'.
Options appraisal study	An options appraisal study looks to identify and assess a range of options that achieve flood risk management objectives whilst delivering other economic, social and environmental benefits. This helps to inform the decision-making process and identify how options work together to identify a preferred option for managing flooding within an area.
Planning policies	Current national planning policies, Scottish Planning Policy and accompanying Planning Advice notes restrict development within the floodplain and limit exposure of new receptors to flood risk. In addition to national policies, local planning policies may place further requirements within their area of operation to restrict inappropriate development and prevent unacceptable risk.
Potentially Vulnerable Areas (PVA)	Catchments identified as being at risk of flooding and where the impact of flooding is sufficient to justify further assessment and appraisal. There were 243 PVAs identified by SEPA in the 2011 National Flood Risk Assessment and were the focus of the first flood risk management planning cycle. There are 233 PVAs identified for the 2018 National Flood Risk Assessment.
Preferred option	A preferred option identifies the collection of flood management options which combined offer the most suitable way of managing flooding within an area. Based on the economic, social and environmental benefits of the options.

Property level protection	Property level protection includes flood gates, sandbags and other temporary barriers that can be used to prevent water from entering individual properties during a flood.
Property level protection scheme	Some responsible authorities may have a formal scheme to provide, install and maintain property level protection for properties.
Ramsar sites	Ramsar sites are wetlands of international importance designated under the Ramsar Convention.
Receptor	Refers to the entity that may be impacted by flooding (a person, property, infrastructure or habitat). The vulnerability of a receptor can be reduced by increasing its resilience to flooding.
Residual risk	The risk which remains after risk management and mitigation. This may include risk due to very severe (above design standard) storms or risks from unforeseen hazards.
Resilience	The ability of an individual, community or system to recover from flooding.
Responsible authority	Designated under the Flood Risk Management (Scotland) Act 2009 and associated legislation as local authorities, Scottish Water and, from 21 December 2013, the National Park Authorities and Forestry Commission Scotland. Responsible authorities, along with SEPA and Scottish Ministers, have specific duties in relation to their flood risk related functions.
Return period	A measure of the rarity of a flood event. It is the statistical average length of time separating flood events of a similar size. (See Likelihood).

Term	Definition
Revetment	Sloping structures placed on banks or at the foot of cliffs in such a way as to deflect the energy of incoming water.
Riparian	The riparian area is the interface between land and a river or stream. For the purposes of flood risk management plans this commonly refers to the riparian owner, which denotes ownership of the land area beside a river or stream.
River basin management planning (RBMP)	The Water Environment and Water Services (Scotland) Act 2003 transposed the European Water Framework Directive into Scots law. The Act created the River Basin Management Planning process to achieve environmental improvements to protect and improve our water environment. It also provided the framework for regulations to control the negative impacts of all activities likely to have an impact on the water environment.
Runoff reduction	Actions within a catchment or sub-catchment to reduce the amount of runoff during rainfall events. This can include intercepting rainfall, storing water, diverting flows or encouraging infiltration.
Scottish Advisory and Implementation Forum for Flooding (SAIFF)	The stakeholder forum on flooding set up by the Scottish Government to ensure legislative and policy aims are met and to provide a platform for sharing expertise and developing common aspirations and approaches to reducing the impact of flooding on Scotland's communities, environment, cultural heritage and economy.

Sediment balance	Within a river where erosion and deposition processes are equal over the medium to long-term resulting in channel dimensions (width, depth, slope) that are relatively stable.
Sediment management	Sediment management covers a wide range of activities that includes anything from the small scale removal of dry gravels to the dredging of whole river channels and the reintroduction of removed sediment into the water environment. Historically, sediment management has been carried out for several reasons, including reducing flood risk, reducing bank erosion, for use as aggregate and to improve land drainage.
Self help	Self help actions can be undertaken by any individuals, businesses, organisations or communities at risk of flooding. They are applicable to all sources, frequency and scales of flooding. They focus on awareness raising and understanding of flood risk.
Sewer flooding (and other artificial drainage system flooding)	Flooding as a result of the sewer or other artificial drainage system (e.g. road drainage) capacity being exceeded by rainfall runoff or when the drainage system cannot discharge water at the outfall due to high water levels (river and sea levels) in receiving waters.
Site protection plans	Site protection plans are developed to identify whether normal operation of a facility can be maintained during a flood. This may be due to existing protection or resilience of the facility or the network.
Shoreline Management Plan (SMP)	A Shoreline Management Plan is a large scale assessment of the coastal flood and erosion risks to people and the developed, historic and natural environment. It sets out a long-term framework for the management of these risks in a sustainable manner.
Site of Special Scientific Interest (SSSI)	Sites of Special Scientific Interest are protected by law under the Nature Conservation (Scotland) Act 2004 to conserve their plants, animals and habitats, rocks and landforms.

Term	Definition
Source of flooding	The type of flooding. This can be coastal, river, surface water or groundwater.
Special Area of Conservation (SAC)	Special Areas of Conservation are strictly protected sites designated under the European Habitats Directive. The Directive requires the establishment of a European network of protected areas which are internationally important for threatened habitats and species.
Special Protection Areas (SPA)	Special Protection Areas are strictly protected sites classified in accordance with the European Birds Directive. They are classified for rare and vulnerable birds (as listed in the Directive), and for regularly occurring migratory species.
Standard of protection (SoP)	All flood protection structures are designed to be effective up to a specified flood likelihood (Standard of Protection). For events beyond this standard, flooding will occur. The chosen Standard of Protection will determine the required defence height and / or capacity.
Storage area	A feature that can be used to store floodwater, this can be natural in the form of low lying land or manmade such as a reservoir or modified landform.

Strategic Environmental Assessment (SEA)	A process for the early identification and assessment of the likely significant environmental effects, positive and negative, of activities. Often considered before actions are approved or adopted.
Strategic Flood Risk Assessment (SFRA)	A Strategic Flood Risk Assessment is designed for the purposes of specifically informing the Development Plan Process. A SFRA involves the collection, analysis and presentation of all existing and readily available flood risk information (from any source) for the area of interest. It constitutes a strategic overview of flood risk.
Strategic mapping improvements	Strategic mapping improvement actions have been identified in locations where SEPA is planning to undertake additional modelling or analysis of catchments and coastlines, working collaboratively with local authorities where appropriate, to improve the national understanding of flood risk.
Surcharge	Watercourses and culverts can carry a limited amount of water. When they can no longer cope, they overflow, or 'surcharge'.
Surface water flooding	Flooding that occurs when rainwater does not drain away through the normal drainage systems or soak into the ground, but lies on or flows over the ground instead.
Surface Water Management Plan (SWMP)	A plan that takes an integrated approach to drainage accounting for all aspects of urban drainage systems and produces long term and sustainable actions. The aim is to ensure that during a flood the flows created can be managed in a way that will cause minimum harm to people, buildings, the environment and business.
Surface water plan / study	The management of flooding from surface water sewers, drains, small watercourses and ditches that occurs, primarily in urban areas, during heavy rainfall. Flood risk management plan actions in this category include: Surface Water Management Plans, Integrated Catchment Studies and assessment of flood risk from sewerage systems (Flood Risk Management Act, Section 16) by Scottish Water. These have been selected as appropriate for each Potentially Vulnerable Area.
Term	Definition
Sustainable flood risk management	The sustainable flood risk management approach aims to meet human needs, whilst preserving the environment so that these needs can be met not only in the present, but also for future generations. The delivery of sustainable development is generally recognised to reconcile three pillars of sustainability – environmental, social and economic.
Sustainable drainage systems (SuDS)	A set of techniques designed to slow the flow of water. They can contribute to reducing flood risk by absorbing some of the initial rainfall and then releasing it gradually, thereby reducing the flood peak and helping to mitigate downstream problems. SuDS encourage us to take account of quality, quantity and amenity / biodiversity.
Target area	Target areas are based on communities at risk of flooding. These are situated within Potentially Vulnerable Areas and should benefit from actions to reduce flood risk. To benefit the community, actions may apply to outside the target area. National flood risk management efforts and funding should be targeted to benefit these target areas.

UK Climate Change Projections (UKCP18)	The leading source of climate change information for the UK. It can help users to assess their climate risks and plan how to adapt to a changing climate. The high emissions scenario refers to the RCP8.5 emission scenario. See the UKCP18 climate change projections report for details.
Utility assets	Within the flood risk management plans this refers to electricity sub stations, mineral and fuel extraction sites, telephone assets, television and radio assets.
Voe	A dialect term, common in place names and used to refer to a small bay or creek in Orkney or Shetland.
Vulnerability	A measure of how likely someone or something is to suffer long-term damage as a result of flooding. It is a combination of the likelihood of suffering harm or damage during a flood (susceptibility) and the ability to recover following a flood (resilience).
Wave energy dissipation	Process by which a wave loses its energy.
Wave overtopping	Wave overtopping occurs when water passes over a flood wall or other structure as a result of wave action. Wave overtopping may lead to flooding particularly in exposed coastal locations.