



# Flood Risk Management Plan

## Findhorn, Nairn and Speyside Local Plan District

Publication date: 22 December 2021

**Terms and conditions Ownership:**

All intellectual property rights for Flood Risk Management Plan is owned by SEPA or its licensors. The Flood Risk Management Plan cannot be used for or related to any commercial, business or other income generating purpose or activity, nor by value added resellers. You must not copy, assign, transfer, distribute, modify, create derived products or reverse engineer the Flood Risk Management Plan in any way except where previously agreed with SEPA. Your use of the Flood Risk Management Plan must not be detrimental to SEPA, its activities or the environment.

**Warranties and Indemnities:**

All reasonable effort has been made to ensure that the Flood Risk Management Plan is accurate for their intended purpose, no warranty is given by SEPA in this regard. Whilst all reasonable effort has been made to ensure that the Flood Risk Management Plan is up to date, complete and accurate at the time of publication, no guarantee is given in this regard and ultimate responsibility lies with you to validate any information given. SEPA will not be responsible if the information contained in the Flood Risk Management Plan is misinterpreted or misused by you.

**Copyright and acknowledgements:**

Full copyright and acknowledgements is available in Annex 3.

**Data Protection:**

You agree not to use the Flood Risk Management Plan in any way that constitutes a breach of the Data Protection Legislation including the General Data Protection Regulation and the Data Protection Act 2018.

**No Partnership or Agency:**

Nothing in these Terms and Conditions are intended to, or shall be deemed to, establish any partnership or joint venture between you and SEPA.

**No Interference:**

Nothing within these Terms and Conditions interferes with the statutory rights or obligations of you or SEPA.

**Jurisdiction:**

These Terms and Conditions are governed by Scots law and in the event of any dispute you agree to submit to the exclusive jurisdiction of the Scottish Courts.

For information on accessing this document in an alternative format or language please either contact SEPA by telephone on 03000 99 66 99 or by email at [equalities@sepa.org.uk](mailto:equalities@sepa.org.uk)

If you are a user of British Sign Language (BSL) the Contact Scotland BSL service gives you access to an online interpreter enabling you to communicate with us using sign language.

<http://contactscotland-bsl.org/>

Please refer to [frequently asked questions](#) for up-to-date contact details.

If you would like to contact us in writing, please mark any correspondence for the attention of FRM Planning and send to:

Scottish Environment Protection Agency  
Angus Smith Building  
6 Parklands Avenue  
Eurocentral  
Holytown  
North Lanarkshire  
ML1 4WQ

This document has been produced in collaboration with:



## Foreword

As we watch the news on TV or scan video clips on social media, we see much more regular violent weather. Bushfires of unprecedented size, ferocity and frequency happening in fire prone parts of the world and now happening where they were uncommon such as Siberia. Cyclones, tornadoes, heatwaves, droughts and, of course, as most affects Scotland - floods.

Anyone who has been in a flood area knows the intimidating terror it can bring. The foreboding that comes as people confront the potential damage or destruction of homes, businesses and other properties as well as injuries and, in the worst cases, loss of life.

This is all being made worse by the Climate Emergency. The recent COP26 meeting in Glasgow brought the world together to agree actions to do two things:

1. Reduce the emission of the greenhouse gases driving climate change, and
2. Help us adapt to the level of climate change that, despite our best efforts, is occurring.

The publication of this flood risk management plan is one of SEPA's key actions to help Scotland with this second aim.

As a society, we need to take action to manage the risk of flooding and its impacts on our lives, recognising that the risk can't ever be removed entirely. This plan takes our knowledge and understanding of flooding and the impacts of climate change and turns it into a set of actions that are planned, prioritised and co-ordinated to tackle flooding in the communities where it affects us the most.

Across Scotland, we now estimate that there are around 284,000 homes and businesses at risk of flooding. Our latest analysis shows that this could increase by around a further 110,000 homes and businesses if little or no action is taken to tackle climate change. Let's look at just one area of Scotland for an example of the local impact. Within the Findhorn, Nairn and Speyside Local Plan District it is estimated there are around 7,300 homes and businesses at risk from flooding, and this may increase to 9,900 homes and businesses by the 2080s due to climate change. All up, in this part of Scotland, there is a risk of river, surface water and coastal flooding and the expected annual cost of flooding is around £8.2 million.



**So given the assessment undertaken, this plan:**

- Describes the ambition for managing flooding and the priorities for action that we believe are most important and helps inform the development of local plans. A local flood risk management plan co-ordinated by The Moray Council, provides additional detail on the responsibility for delivery, funding and coordination of actions across the Local Plan District. Taken together, these documents describe the commitment of responsible authorities to address flooding.
- Is published by SEPA and has been approved by Scottish Ministers. SEPA is just one organisation in the collective effort to manage flooding and this plan has been produced with the support and collaboration of The Moray Council, The Highland Council, Cairngorms National Park Authority, Scottish Water and others with an interest in flood management. SEPA has taken account of the views received through a public consultation carried out during the development of the plan.
- Is based on the fact that how we plan for and manage our flood risk has far reaching consequences for Scotland's communities. The plans set the national direction of future flood risk management, helping to target investment and coordinate actions across public bodies. They explain what causes flooding in high-risk areas as well as the impacts when flooding does occur. This information is used as a basis for better decision-making across flood risk management organisations.

A lot of people, inside and outside SEPA, have contributed to the development of this plan. It underpins important decisions that will be made to protect people and property in Scotland from flooding and I hope that you find it valuable and useful.



Terry A'Hearn

Chief Executive

# Contents

## Section 1: Flood risk management in Scotland

1.1	What is a flood risk management plan? .....	<a href="#"><u>1</u></a>
1.2	Managing flooding in Scotland .....	<a href="#"><u>2</u></a>
1.3	How the flood risk management plans were developed .....	<a href="#"><u>9</u></a>
1.4	Links with other plans and policies .....	<a href="#"><u>15</u></a>
1.5	Next steps and monitoring progress .....	<a href="#"><u>17</u></a>
1.6	Supporting information .....	<a href="#"><u>19</u></a>

## Section 2: Findhorn, Nairn and Speyside Local Plan District

2.1	Overview of flood risk .....	<a href="#"><u>22</u></a>
2.2	Actions across the Local Plan District .....	<a href="#"><u>23</u></a>
2.3	Potentially vulnerable areas .....	<a href="#"><u>31</u></a>

## Annexes

A1	Costs of actions .....	<a href="#"><u>96</u></a>
A2	Flood risk management plans consultation summary .....	<a href="#"><u>97</u></a>
A3	Acknowledgements .....	<a href="#"><u>102</u></a>

# Section 1: Flood risk management in Scotland

---

## 1.1 What is a flood risk management plan?

Flood risk management plans are Scotland's route map for reducing the effects of flooding on our communities. This is key to Scotland's health, well-being and economic success. They are also important in our response to the climate emergency as flooding is increasing due to climate change.

Flood risk management plans have been designed to ensure effort to reduce flood risk in Scotland is coordinated. Many organisations are responsible for flood risk management and the plans focus the work of these organisations to where the risk of flooding and benefits of action are greatest. The roles and responsibilities of some of the key organisations involved are set out later in this plan.

There is a plan for each of the 14 flood risk management districts in Scotland, which are called Local Plan Districts. These plans set out the long term ambition for flood risk management. They set objectives for tackling flooding in high risk areas and identify the actions needed to work towards those objectives. These are agreed by the responsible authorities and are based on the best available evidence on the causes and consequences of flooding. The actions are described and prioritised in 6 year planning cycles.

These plans complement the separate local flood risk management plans published in 2022. The local flood risk management plans explain in more detail how the actions set out in this plan for 2022 to 2028 will be delivered. They are published by the local authority who is nominated as the lead local authority for the Local Plan District.

The plans replace the first flood risk management plans which were published in 2015. At the time they were called flood risk management strategies. The updated flood risk management plans continue to build on the risk-based, plan-led approach established in the 2015 strategies.

The flood risk management plans are published by SEPA as Scotland's strategic flood risk management authority and are approved by Scottish Ministers. They have been prepared in

collaboration with all 32 local authorities, Scottish Water and other organisations with a responsibility or interest in managing flooding. They have also been shaped in consultation with the public.

The flood risk management plans are required under the Flood Risk Management (Scotland) Act 2009 and will be updated every 6 years.

## **1.2 Managing flooding in Scotland**

Flooding needs to be managed sustainably so that flood risk is reduced without moving the problem elsewhere. It must be done in a way that contributes to the health and wellbeing of communities, supports the protection and regeneration of the environment, improves resilience to climate change and enables a sustainable economy. Actions are needed on all sources of flooding – including from rivers, the sea, surface water and groundwater – to meet the needs of present and future generations while also protecting and enhancing the environment.

Using a 6 year planning cycle enables new data, improved techniques and developing knowledge and understanding to be incorporated regularly into the national approach. Using all the latest information to regularly review our assessment of flood risk forms the foundation of a risk-based, plan-led approach to managing flooding sustainably. We have outlined below the key stages of the flood risk management process.

### **1.2.1 Progress in cycle 1: 2015-2021**

The 2015 flood risk management strategies outlined the long term objectives to tackle flooding in the areas at highest risk.



In 2015 the objectives were split into two categories which were defined as:

- **Reduce overall flood risk:** to reduce the risk of flooding from all sources (river, sea and surface water) as far as reasonable, taking account of economic, environmental and social priorities.
- **Avoid an increase in flood risk:** to avoid increasing flood risk through land use planning and maintenance of existing flood management infrastructure.

The objectives for each area were agreed by the responsible authorities. Then actions were developed to deliver these objectives. Actions to deliver the reduce objectives included developing flood studies and flood protection schemes and providing public flood warnings and alerts. Actions for the avoid objective included maintenance of flood defences and storage areas and producing strong planning policies which prevent development from taking place in flood risk areas.

As the first planning cycle ends, it is important to review the progress made in achieving these objectives. A summary is provided below. A full assessment will be published in 2022 by the lead local authorities and will provide progress on each of the actions.

The summary is based on data from the mid-cycle reports published by lead local authorities in 2019. The status of each action at that time was assessed, and reported as red, amber or green:

- Red: The action is running late or over budget and is unlikely to meet its aims.
- Amber: The action is running late or over budget but is still likely to meet its aims.
- Green: The action is complete or is on track to meet its aims.

Actions with a green or amber status can be expected to succeed in working towards their objectives.

In this summary, the action progress described in the 2019 mid-cycle reports is used to assess progress in delivering the avoid and reduce objectives.

**a) Progress towards meeting the avoid objectives**

90% of the actions set out in the strategies to avoid an increase in flood risk were green at the time of the mid-cycle report. 10% of the actions were amber. By 2021, 100% of the actions are expected to be complete.

**b) Progress towards meeting the reduce objectives**

84% of the actions described in the strategies to reduce flood risk were green at the time of the mid-cycle report, 12% of the actions were amber and 4% were red. With 96% of the actions completed or underway by 2021, the actions developed to meet the reduce objectives will mostly be achieved.

This summary confirms that significant progress has been achieved towards meeting the objectives set out in the 2015 strategies.

Progress made towards delivering the objectives was fully considered when developing the objectives and actions in these updated flood risk management plans.

### **1.2.2 Improving the understanding of flooding**

Since publication of the 2015 flood risk management strategies, SEPA has continued to develop the flood hazard and risk maps. The hazard maps show information on the extent of flooding, and also on depth and velocity where that information is available. The flood risk maps provide detail on the impacts of flooding on people, the economy, cultural heritage and the environment.

Many actions included in the 2015 strategies, such as detailed flood studies improved understanding of flooding. This is an ongoing area of development and new information resulting from actions in these plans will be incorporated into future reviews of the understanding of flooding, to better inform decisions on flood risk management in the future.

In 2012 SEPA also developed an assessment of the potential for natural flood management. The assessment produced the first national source of information on where natural flood management actions would be most effective within Scotland.

The flood hazard and risk maps and the assessment of the potential for natural flood management can be viewed on the SEPA website at

<https://www.sepa.org.uk/environment/water/flooding/flood-maps/>

### **1.2.3 National flood risk assessment**

SEPA's flood hazard maps form the basis for the national flood risk assessment (NFRA). The NFRA provides the underpinning evidence for the risk-based approach in the flood risk management plans. SEPA published the second NFRA in 2018 which is available to view at <https://www.sepa.org.uk/data-visualisation/nfra2018/>.

To make best use of the data available and new techniques and information, there were several areas of improvement in the 2018 NFRA, building on the first NFRA published in 2011. The most significant change was in the representation of buildings. The 2011 NFRA represented buildings as single points. In 2018 the whole footprint of the building was used meaning buildings can be identified at flood risk even when only partially within the flood extent. Updated information on building locations, property type and the economic classification of buildings was also used to improve the assessment. These method updates resulted in a 3% increase in the number of homes and a 45% increase in the number of businesses being identified at flood risk in 2018.

Another development for the 2018 NFRA was to take account of how frequently flooding occurs. Different likelihoods of flooding were used to assess the effects on individual receptors. This allowed for the frequency of impacts to be considered as well as the severity of larger floods.

The 2018 NFRA also assessed social vulnerability to flooding and the resulting flood disadvantage. This is important as it becomes clear that climate change will impact vulnerable communities disproportionately and therefore this has been included in the evidence used to plan actions to manage flood risk in Scotland.

Finally, updated methods outlined in The Flood Hazard Research Centre's Multi-Coloured Manual and Multi-Coloured Handbook 2016 were also incorporated. They are the best available techniques for assessing the impacts of flooding and are used to produce information on the annual cost of flooding.

### 1.2.4 Climate change

The latest science on the effects of climate change predicts that parts of Scotland will experience wetter winters and more extreme weather events. Although summers might generally be drier there will be a greater risk of very intense rainfall. Sea levels are also expected to rise, and all these effects will lead to an increase in the frequency and severity of damaging floods.

In November 2020 SEPA published future flood maps showing the impacts of climate change on flooding in Scotland for the first time. The maps are based on the 2080s high emissions scenario and their development allowed significant advances in how climate change was assessed in the 2018 NFRA. This enabled climate change to be more fully built into the development of the flood risk management plans. The future flood maps are available to view at <https://map.sepa.org.uk/floodmaps>

Currently 284,000 homes, business and services are at risk of flooding from rivers, surface water and the sea. With the effects of climate change, an additional 110,000 homes, businesses and services are expected to become at risk across all sources of flooding in Scotland. Compared with the current level of flood risk, this represents a 90% increase in the number of properties at risk of coastal flooding, 40% increase in the number for river flooding and 25% for surface water flooding.

### 1.2.5 Potentially vulnerable areas (PVAs)

The 2018 NFRA was used to review the areas where flood risk is considered to be nationally significant. These are the areas with the greatest current or future flood risk. They are based on catchment areas, as it is only within the context of the wider contributing catchment that flooding can be best understood and managed. These nationally significant areas are referred to as Potentially Vulnerable Areas (PVAs) and are where the plans must deliver objectives and actions to manage flood risk.

A detailed manual review process was applied to the identification of PVAs to allow local knowledge from responsible authorities, communities, and any other supporting information to be considered.



SEPA engaged the public through a 3 month consultation on the PVAs, providing the opportunity for others to contribute to the assessment and to provide any additional information. As a result, amendments were made before the final 235 PVAs were agreed.

Around 90% of Scotland's flood risk is contained within PVAs. That means that not every location experiencing flood risk is included within a PVA, as PVAs are used to prioritise where the risk is highest, and benefits of flood risk management will be greatest. This plan includes national actions that apply across whole Local Plan Districts, including areas that are not within a PVA. The identification of the PVAs is reviewed every 6 years.

### **1.2.6 Identifying objectives and selecting actions**

The objectives provide the long term vision for delivering flood risk management in Scotland, and the actions give the practical steps required to achieve those objectives.

A community perspective was used to identify where flood risk management actions should target their benefits. Those areas are described as target areas.

A whole catchment approach was then used to understand the flood risk and the steps needed towards managing the risk. Objectives and actions have been set for each target area within each PVA. National actions have also been identified, which apply across all Local Plan Districts including to areas that are not within PVAs.

Objectives were set by SEPA in collaboration with other flood risk management authorities and partners and follow a set of national principles designed to deliver sustainable flood management. The national principles are:

- Take a long term, risk-based approach to decisions, considering the impacts of climate change and how we will be able to adapt.
- Deliver coordinated management of flood risk by engaging with communities and working in partnership with others.
- Consider whole catchments and coastlines, working with natural processes and the environment to deliver multiple benefits.

These national principles sit alongside the more specific target area objectives.

The target area objectives fall into the following four categories in the 2021 plans:

- Avoid increasing flood risk
- Improve understanding of the flood risk
- Prepare for current flood risk and future flooding
- Reduce the risk of flooding

Actions are required to achieve the objectives set for each community. To identify the most sustainable actions, SEPA created a long list of all potential structural and non-structural actions. A decision framework was used to identify the most appropriate set of actions taking account of how well flood risk is currently understood in the area, what the scale of the risk is and whether the options meet the national principles set out above. Indicative costs for different types of action can be found in Annex 1.

The potential for natural flood management and blue-green infrastructure measures was explored in developing the most sustainable actions. However, these actions are not specifically noted as the need to consider such options is built into all actions for detailed flood studies, and all actions to appraise potential options for managing risk.

The overall long-term aim is to reduce the impact of flooding across Scotland as far as is reasonable, taking full account of environmental, economic, and social priorities and needs.

### **1.2.7 Catchment opportunities and constraints**

Our natural landscape plays an important role in managing flood risk and consideration of the whole catchment is essential to sustainable flood risk management. This has informed our approach, which is to identify the wider contributing catchments and coastlines for all the areas where actions are targeted. The catchment perspective has also underpinned the selection of all the objectives and actions.

Taking this approach can reveal opportunities for natural flood management, as well as constraints to the options for managing flood risk. The latest available data on land cover, land use, geology, topography, hydrology, coastal processes, development planning and natural flood management was used to identify opportunities and constraints in the wider

contributing catchments of every target area. This information was used to support the decision framework for identifying actions. It will also inform the more detailed analysis of the opportunities in the catchment required for implementation of the actions. This is a core requirement of some of the actions identified, particularly where a detailed flood study or options appraisal is planned.

For coastal areas, a significant development in the information available on opportunities and constraints is the national coastal change assessment. This analysis includes past coastal erosion rates and makes projections for the future. On this basis we can take longer-term decisions for coastal management. More information is available at [www.dynamiccoast.com](http://www.dynamiccoast.com)

## **1.3 How the flood risk management plans were developed**

### **1.3.1 Partnership working**

Many organisations and individuals are involved in flood risk management in Scotland. The causes and effects of flooding are complex, and issues cross the boundaries of neighbouring authorities as well as the responsibilities of different organisations. To be successful, flood risk management needs coordination, as set out in the flood risk management plans. Collaboration by those responsible for flood management is essential along with a commitment to work in partnership with the other organisations and stakeholders who can contribute to the sustainable management of flooding. Partnership working is at the heart of these plans and will be central to delivery of the objectives and actions they set out.

Strong relationships were developed through the first cycle of developing and delivering flood risk management strategies and local flood risk management plans. Building on that, the local partnerships established have worked throughout Scotland to develop this second set of flood risk management plans. SEPA has provided technical analysis and ensured a consistent national approach is taken, providing the evidence to make informed decisions. Local authorities, Scottish Water, other responsible authorities, and members of the local advisory groups have made significant contributions.

They have provided local knowledge, expertise and their experience from the actions delivered in the first cycle, to inform development of the new plans. The roles and responsibilities of some of the organisations with formal flood risk management responsibilities are set out below. There are a wide range of other stakeholders involved in flood risk management. Some work directly with responsible authorities through the local partnerships and advisory groups. Others, by virtue of their interests and activities, deliver direct action which can benefit flood risk management. Through the lifetime of this plan, we will seek to strengthen existing partnerships and establish new ones to achieve the best outcomes for flood risk management.

### **1.3.2 Roles and responsibilities for flood risk management**

Individuals have a personal responsibility to protect themselves and their property from flooding. However, public bodies have responsibilities too and are working together to reduce the impacts of flooding in Scotland. Some of the key roles are outlined below and more information is available from the SEPA website, or the organisations listed.

#### **a) Your responsibilities**

It is your responsibility to manage your own flood risk and protect yourself, your family, property or business. There are steps you can take now to be flood prepared and reduce the damage and disruption flooding can have on your life.

- View our flood maps to check if your area is affected by flooding  
<https://map.sepa.org.uk/floodmaps>
- Sign up to Floodline to receive messages when flooding is forecast in your area  
<https://www.floodlinescotland.org.uk/>
- Know who to contact if flooding happens  
[https://www.sepa.org.uk/media/28952/who\\_to\\_contact\\_2014.pdf](https://www.sepa.org.uk/media/28952/who_to_contact_2014.pdf)

Other useful tools and advice on how to be prepared are available on the [Floodline](#) website.



**b) SEPA**

SEPA is Scotland's national flood forecasting, flood warning and strategic flood risk management authority. SEPA work in partnership with the Met Office to forecast flooding and operate Floodline to warn the public and emergency responders when flooding is likely. SEPA produce Scotland's flood risk management plans, working closely with other organisations responsible for managing flood risk to ensure that a nationally consistent approach to flood risk management is adopted. SEPA also provide flood risk advice on land use planning when requested and raise awareness of flooding at a national level through education initiatives, community engagement and campaigns.

**c) Local authorities and lead local authorities**

Local authorities are responsible for working together to produce Scotland's local flood risk management plans and work in partnership with SEPA, Scottish Water and other responsible authorities to develop these.

It is the responsibility of local authorities to implement action to manage flooding and maintain flood defences. Local authorities also inspect, clear and repair watercourses to reduce flood risk and routinely maintain road gullies on public roads and highways.

During severe flooding, local authorities will work with the emergency services and co-ordinate shelter for people evacuated from their homes.

**d) Scottish Water**

Scottish Water is a responsible authority for flood risk management and is working closely with SEPA, local authorities and others to coordinate plans to manage flood risk. Scottish Water has the public drainage duty and is responsible for draining wastewater from properties and businesses, and rainwater run-off from roofs and paved areas within the boundary of properties. Pipework and guttering within the boundary, are the responsibility of the property owner.

Scottish Water helps to protect homes from flooding caused by sewers either overflowing or becoming blocked. This is done in a way that is fair and consistent to customers across the country, with sewer flooding investment prioritised to provide the biggest benefit for

customers and the environment first. Currently investment to reduce the risk of sewer flooding is prioritised towards properties that have experienced internal sewer flooding and are at the highest risk of repeat occurrence of sewer flooding during frequent rainfall events.

**e) National parks**

The National Park Authorities, Loch Lomond & Trossachs National Park and Cairngorms National Park, work with SEPA and other responsible authorities to develop the flood risk management plans and local flood risk management plans. They also fulfil a key role in land use planning, carrying out and permitting activities that can help manage and reduce flood risk.

**f) Other organisations**

The **Scottish Government** oversees the implementation of the Flood Risk Management (Scotland) Act 2009, which requires the production of flood risk management plans and local flood risk management plans. Scottish Ministers are responsible for setting the policy framework for how organisations collectively manage flooding in Scotland. Scottish Ministers have also approved this flood risk management plan.

**Scottish Forestry** and **Forestry and Land Scotland** took over the roles of Forestry Commission Scotland in 2018 when the Forestry and Land Management (Scotland) Act 2018 came into force. While these executive agencies of Scottish Government are not formally designated as a responsible authority under the Flood Risk Management (Scotland) Act 2009, they support Scottish Government in delivering its flood risk related duties. This includes engaging in the development of the flood risk management plans through national and local advisory groups, Local Plan District partnerships, and collaborative projects. This reflects the widely held view that forestry can play a significant role in managing flooding.

The **Met Office** provides a wide range of forecasts and weather warnings. SEPA and the Met Office work together through the [Scottish Flood Forecasting Service](#), combining SEPA's hydrological expertise with the Met Office's meteorological data to predict the likelihood and timing of river, coastal and surface water flooding.

The **emergency services** provide emergency relief when flooding occurs and can coordinate evacuations. You should call the emergency services on 999 if you are concerned about your safety or the safety of others and act immediately on any advice provided.

The **Scottish Flood Forum** aims to reduce the impacts of flooding by providing immediate support and by establishing a network of community resilience groups in flood risk areas, to equip communities to cope with flooding.

#### 1.3.4 Consultation, engagement and advice

Further to the strong partnership approach to flood risk management planning in Scotland, it is essential to work with the people and communities that experience and live with the threat of flooding. This ensures that our assessment of the risk is accurate. How flooding is managed should support the communities at risk, and effort needs to be targeted to where most can be achieved. Two public consultations have been held during the development of the flood risk management plans. The first by SEPA was on the national flood risk assessment and the identification of PVAs (2018); the second, held jointly with local authorities, was on the understanding of flooding in these priority areas and on the objectives and actions to manage flooding (2021).

The second, most recent consultation ran from December 2020 to October 2021 in 2 parts. From December 2020, information on the Local Plan Districts, the PVAs and the communities identified as target areas was made available. Further information on the objectives and actions planned for each target area was added in July 2021. The consultation was advertised widely by both SEPA and the local authorities. 678 responses were received, and these helped shape the content of this plan. More information on the consultation and the responses SEPA has received is provided in **Annex 2**.

As this was a joint consultation, the responses were shared with local authorities who further considered all the submissions for the purpose of shaping the local flood risk management plans published in 2022. A summary of the consultation was submitted to Scottish Ministers along with this plan, and a more detailed report on what contributors said and what SEPA did in response will be available on SEPA's website from March 2022.

In addition to the consultation, advice has been sought from relevant organisations at key stages. The plans have benefited from local advisory groups who have provided important community and area-based knowledge. This informed understanding of the causes and consequences of flooding and the appropriate actions for future management. Local advisory groups have been especially helpful in considering flood risk management in the context of wider plans and initiatives. The groups include representatives from a range of sectors, including government agencies like Transport Scotland, National Park Authorities, local authorities, non-government organisations, utility companies and land and asset managers.

Community based groups are key to planning for, responding to, and recovering from flooding. Communities have engaged through the consultation on these plans and will be consulted on more detailed information on the implementation of many of the specific actions. The local information provided on their experience of flooding has shaped the identification of PVAs and informed decision making on the objectives and actions.

In producing the flood risk management plans, SEPA has also taken advice from a National Flood Management Advisory Group. Over 50 member organisations have been invited at key stages to provide comment and input, reflecting the national importance and impact of flooding on our communities, economy, environment and cultural heritage.

Some of the work carried out by SEPA has been complex and technical in nature for which we have sought professional advice. Through membership of the Scottish Advisory and Implementation Forum for Flooding (SAIFF), SEPA has received assistance from local authorities, Scottish Water, Scottish Forestry, the National Park Authorities and other key interested organisations. SEPA has also developed some of its methods by working with other organisations with similar responsibilities within the UK and Europe, more specifically with the Environment Agency and English local authorities in the cross border areas.

### **1.3.5 Strategic Environmental Assessment and Habitats Regulation Appraisal**

SEPA undertook a strategic environmental assessment to assess the significant environmental effects of the flood risk management plans. This assessment was published in an environmental report, and SEPA consulted with the public on the findings.



A statement will be published detailing how SEPA have taken account of the environmental assessment and the consultation responses, and how any significant environmental effects from the flood risk management plans will be monitored. SEPA also undertook a Habitats Regulations Appraisal to ensure that the flood risk management plans will not adversely affect the integrity of Special Areas of Conservation, Special Protection Areas and Ramsar Sites. SEPA consulted NatureScot on the appraisal method and took their views into account. Mitigation measures have been applied where required.

## **1.4 Links with other plans and policies**

### **1.4.1 River basin management planning**

River basin management aims to protect and improve the condition of Scotland's rivers, lochs, estuaries, coastal waters and groundwater. Taking action to reduce flood risk in Scotland provides opportunities to deliver joint objectives for restoration and flood risk management. Coordination between river basin management and flood risk management can reduce flood risk, while also improving water quality and biodiversity. SEPA is leading the delivery of both the river basin management plan and the flood risk management plans so has worked to ensure that there is integration and coordination between them. This coordination, particularly in regard to consultation and engagement, is important for stakeholders who have an interest in the objectives of both plans.

### **1.4.2 Land use and spatial planning**

Land use planning decisions are one of the most powerful tools available to manage flood risk, and the alignment of flood risk management and land use planning policy is pivotal to achieving sustainable flood risk management. Decisions relating to flood risk management can have significant implications for the location of development and, likewise, decisions relating to the location of development can impact on flood risk. Flood risk management plans must take account of local development plans relating to the district, and the need for development plans to take account of flood risk management plans is included in the Town

and Country Planning (Development Planning) (Scotland) Regulations 2008 (as amended 2011). SEPA is a key agency in the land use planning process with a duty to cooperate with planning authorities in the preparation of development plans and a statutory role to provide flood advice for appropriate development management applications. The advice we give seeks to promote flood avoidance. In addition, land use planning objectives and actions have been agreed with responsible authorities, which will ensure flood risk is adequately considered in local planning decisions.

### **1.4.3 Emergency planning and response**

Many organisations across Scotland, 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, ensuring the effective management of response to emergencies. 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.

### **1.4.4 Scottish Water investment plans**

There is a close relationship between flood risk management plans and Scottish Water's 25 year strategic plan. Sewer flooding is not considered in detail in the flood risk management plans as it remains a high priority for Scottish Water and its customers. Scottish Water's close involvement in flood risk management planning aims to ensure that there is strong coordination between the management of sewer flooding and wider surface water flood risk, and the actions to be taken forward by local authorities and others.

## 1.5 Next steps and monitoring progress

Flood risk management planning has progressed significantly in recent years. Scotland now has the most advanced, nationally consistent and locally informed understanding of the causes and consequences of flooding that it has ever had. Key partnerships have been developed and the plan-led approach has been strongly established through the first set of strategies and local flood risk management plans. SEPA and the other responsible authorities are committed to continuing to work together, improving the understanding and response to flooding and managing flood risk for the good of Scotland through this and subsequent planning cycles. Lead local authorities will publish the local flood risk management plans in 2022 with greater detail on the scope of the actions identified in this plan and how they will be funded, coordinated and delivered between 2022 and 2028.

Progress will be monitored throughout the years covered by this plan through ongoing joint working arrangements under the Local Plan District partnerships. Lead local authorities will provide an interim report on the progress of delivering all actions in the local flood risk management plans not earlier than 2 years and not later than 3 years from its publication. A final report will also be prepared at the end of the second planning cycle. A third set of flood risk management plans and local flood risk management plans will be published in 2027/2028.

### 1.5.1 Funding review for future flood risk management actions

SEPA has carried out a national prioritisation exercise based on the best available understanding of flood risk and the capacity of lead organisations to deliver actions. Funding for flood risk management actions typically come either directly from the lead organisations or as happened in 2016, through an allocation of capital grant from the Scottish Government. However, funding can be procured from other sources.

The distribution of Scottish Government grant funding for actions in the plan for the period 2022-2028 is currently being considered by a flood risk management working group<sup>1</sup>. This group will put forward options and recommendations to Scottish Ministers and COSLA, through the Settlement and Distribution Group, for consideration. A decision will not be made in time for the publication of this plan. As such it should be noted that it may not be possible for all actions identified in the flood risk management plans to be grant funded. Inclusion of an action in this plan does not formally commit a Council to implement it, if reasons arise which make any actions undeliverable, including inability to secure adequate funding.

A decision on grant funding is expected in time for the publication of the local flood risk management plans. As a result, there may be changes to the detail of actions, or the ability to deliver actions in the identified timescales, compared with this plan. This plan remains the best understanding of the objectives and actions required over the long term to manage flood risk in the identified high risk areas of Scotland. The delivery of the plan, particularly the ambitions on how quickly actions can be delivered, may have to be adapted to reflect wider developments in public funding, the ability of responsible authorities to access funding from other sources, pandemic recovery, and other national priorities.

### 1.5.2 Licensing acknowledgements

Full data licensing acknowledgements can be found in **Annex 3** of this plan.

---

<sup>1</sup> Membership of the group includes representatives from Scottish Government, the Convention of Scottish Local Authorities (COSLA), local authorities, Society of Chief Officers of Transportation in Scotland (SCOTS) flood risk management group and SEPA.

## 1.6 Supporting information

### 1.6.1 Sources of flooding described in this plan

This flood risk management plan targets the risk of flooding from rivers, the coast, surface water and groundwater. The risk of flooding from rivers is usually due to heavy or prolonged rainfall causing a river to rise above the top of the bank. Water spreads out and floods nearby areas. Coastal flooding is where the risk is from the sea. Sea levels can be higher than usual due to normal tidal cycles or stormy weather systems. Over the longer term, sea levels and coastal flood risk will increase due to climate change. Surface water flooding happens when rainwater does not drain away through the normal drainage systems or soak into the ground. Instead, it collects or flows over the ground. There can be interactions between these sources of flooding.

Groundwater is usually a contributing factor to flooding rather than the primary source. It is caused by water rising up from underlying rocks or flowing from springs. Actions to directly target groundwater are quite limited in this plan. However, susceptibility to the contributing effects of groundwater on flooding was considered everywhere in the national flood risk assessment which underpins this plan. Maps of areas where groundwater can contribute to flood risk are available to view on our website: <https://map.sepa.org.uk/floodmap/map.htm>

### 1.6.2 The following aspects of flooding have not been incorporated into this plan:

Reservoir breaches have been assessed under separate legislation (Reservoirs (Scotland) Act 2011) and so flood risk from reservoir breach is not considered in this plan. There are fundamental differences in probability of flooding and associated management actions for reservoirs. Further information and maps can be found on SEPA's website:

[www.sepa.org.uk/regulations/water/reservoirs/](http://www.sepa.org.uk/regulations/water/reservoirs/)

The Flood Risk Management (Scotland) Act 2009 does not require SEPA or responsible authorities to assess or manage coastal erosion. However, SEPA has included consideration of coastal erosion in the flood risk management plans by identifying areas that are likely to be susceptible to erosion and where erosion can exacerbate flood risk.

As part of considering where actions might deliver multiple benefits, SEPA have looked to see where the focus of coastal flood risk management studies coincides with areas at risk of coastal erosion as identified by the Dynamic Coast project. Subsequent detailed flood studies and scheme design will need to consider coastal erosion in these areas. This includes ensuring that actions to manage flood risk do not contribute to increased coastal erosion and where appropriate, help to manage risks from coastal erosion now and in the future.

The information on coastal flooding used to set objectives and identify actions is based in most areas on SEPA modelling using simplified coastal processes and flooding mechanisms. As a result, coastal flood risk may be underestimated in some areas and overestimated in others. Where more detailed local models were available from flood studies or from flood warning schemes, these have been incorporated into the development of the flood risk management plans, as have other sources of local information such as records of past flooding. SEPA is currently working on updates to the national coastal flood mapping to better represent the effects of waves. Actions in the plans reflect the best information currently available.

### 1.6.3 Commonly used terms

Below are explanatory notes for commonly used terms in this plan. A glossary of terms is also available at the end of this document.

**Reference to flood risk.** To develop this plan, flood risk has been assessed over a range of likelihoods. For consistency in reporting information, unless otherwise stated, all references to properties or other receptors being ‘at risk of flooding’ refer to a medium likelihood flood (up to a 0.5% chance of flooding in any given year). By exception, references will be made to high or low risk flooding, which should be taken to mean a 10% chance/likelihood or 0.1% chance/likelihood of flooding in any given year respectively.

Chance / likelihood of flooding		
Likelihood	Return Period	Annual chance
High	1 in 10 year	10%
Medium	1 in 200 year	0.5%
Low	1 in 1000 year	0.1%

An **annual cost of flooding** is given as an assessment of the economic impact of flooding within an area. 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 many years. It does not mean that value of damage will occur every year: in many years there will be no damages and in some years the damages will be minor. In most places, there will be a very small number of years when much bigger floods occur, and that is when the highest damage costs will occur. To assess the annual cost, this is averaged over many years. In some areas, smaller floods which happen frequently contribute more to the annual cost than much larger events which are rarer. Within the plans, the annual cost of flooding has been calculated based on the methods set out in the Flood Hazard Research Centre's Multi-Coloured Handbook (2016).

**History of flooding.** Where the plans refer to a history of past flooding, flood events up to 2019/20 have been taken into account.



## Section 2: Findhorn, Nairn and Speyside Local Plan District (LPD 5)

### Flood risk management plan 2022-2028

---

The Findhorn, Nairn and Speyside Local Plan District covers an area of around 4,800km<sup>2</sup> and has a population of approximately 100,000 people. It includes the low-lying coastal areas around Nairn and Lossiemouth in the north and the steeper, more rugged landscape of the Cairngorms National Park in the south.

The area is largely rural with the main land cover including heather grassland, bog, coniferous woodland and agricultural land. The main rivers are the River Spey, the River Findhorn and the River Nairn. The coastline is approximately 70km long and includes rocky shorelines and extensive beaches.

There is river, surface water and coastal flood risk in the Local Plan District, with the main risk coming from river and surface water flooding. The area has been affected by several large floods. In December 2012 a storm led to coastal flooding in Lossiemouth and Kingston and in August 2014 ex-hurricane Bertha caused widespread river flooding with Elgin and Dallas particularly affected.

Currently it is estimated that there are 11,000 people and 7,300 homes and businesses at risk from flooding. This is estimated to increase to 15,000 people and 9,900 homes and businesses by the 2080s due to climate change. The annual cost of flooding is approximately £8.2 million. Note however that flooding from wave overtopping is not fully represented in the assessment of flood risk and the impact of coastal flooding may be underestimated.

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 The Moray Council who is the lead authority. Other responsible authorities include The Highland Council, Cairngorms National Park Authority and Scottish Water.

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

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.

## 2.2 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 6 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 through national and local initiatives to help communities understand the risk of flooding and what actions individuals can take. 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>

	<b>Data to support climate resilience</b>
<b>Action</b>	<p>As Scotland's hydrometric authority, SEPA operates a network of stations to measure river level, flow, rainfall, sea level, loch and groundwater level. The data goes into a long term data archive and is critical to underpin all flood risk management activities including flood warning, flood mapping, design of flood protection and sustainable development as well as supporting a range of regulatory and recreational uses.</p> <p>SEPA will continue to maintain and develop its hydrometric network, contribute to UK and international data archives, and improve and update the datasets used for flood frequency analysis.</p> <p>SEPA will support research and development of data, methods and guidance to improve the evidence on which decisions can be made, and to enable the impact of climate change to be included in all flood risk management activities.</p>

	<b>Emergency plans</b>
<b>Action</b>	<p>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.</p>

	<b>Flood forecasting</b>
<b>Action</b>	<p>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.</p>

	<b>Flood warning development framework</b>
<b>Action</b>	<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>

	<b>Future flood risk management planning</b>
<b>Action</b>	<p>The years covered by the lifetime of this plan are crucial. Radical progress is needed in how we reduce our impact on the climate and respond to the effects of climate change. How we plan to manage flooding to our communities is on the front line of the challenges of this decade. The 2027 flood risk management plans will be more ambitious than ever before.</p> <p>We will plan for a better future by publishing our flooding services strategy in 2022 with a clear and measurable delivery plan. We will put greener, fairer communities at the heart of our ambitions.</p> <p>SEPA has set its own target to be a regenerative organisation by 2030 and the next set of plans will further this ambition.</p> <p>During this plan cycle, SEPA will work to develop new partnerships with a wider range of stakeholders, including businesses and commercial sectors. We will investigate alternative sources of finance to tackle flooding and drive forward practical options for adaptation.</p>

	<b>Guidance development</b>
<b>Action</b>	<p>The Scottish Government and SEPA will develop and update guidance to inform flood risk management projects. This guidance will be produced in 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 be reviewed and updated by SEPA where required.</p>

	<p>Scottish Forestry, in collaboration with its UK counterparts, will produce guidance on designing and managing forests to reduce flood risk.</p> <p>Guidance will be developed to help local authorities understand the requirements for mapping relevant bodies of water and sustainable urban drainage systems in their areas.</p>
--	--

	Hazard mapping updates
Action	<p>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:</p> <p><a href="https://www.sepa.org.uk/environment/water/flooding/flood-maps/">https://www.sepa.org.uk/environment/water/flooding/flood-maps/</a>.</p> <p>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.</p>

	Land use planning
Action	<p>Local authorities, SEPA and Scottish Water all have a responsibility under the Flood Risk Management (Scotland) Act 2009 to support sustainable flood risk management through the land use planning process. National planning policies set out the Scottish Ministers' priorities 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 aim to restrict development within the floodplain and limit exposure of new receptors to flood risk, promote flood reduction via natural and structural flood management measures and restoration of natural features, and avoid increased surface water flooding through sustainable drainage and the minimisation of impermeable surfaces.</p>

	Locally determined planning policies may place further requirements within their area of operation to restrict inappropriate development and prevent unacceptable risk.
--	---

	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 continue to support activities that improve our understanding of how to effectively target and deliver natural flood management. As part of this, SEPA will review and update the opportunities mapping for natural flood management. This will include linking blue-green infrastructure with the surrounding natural catchment and coastline. 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, recreation, and carbon storage.
--	---

	<b>National flood risk assessment</b>
<b>Action</b>	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 21st century. SEPA will use the most suitable data to develop the national flood risk assessment (NFRA) 2024. This assessment will be used to identify future potentially vulnerable areas.

	<b>National surface water mapping</b>
<b>Action</b>	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 6 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.

	<b>Reservoirs</b>
<b>Action</b>	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.

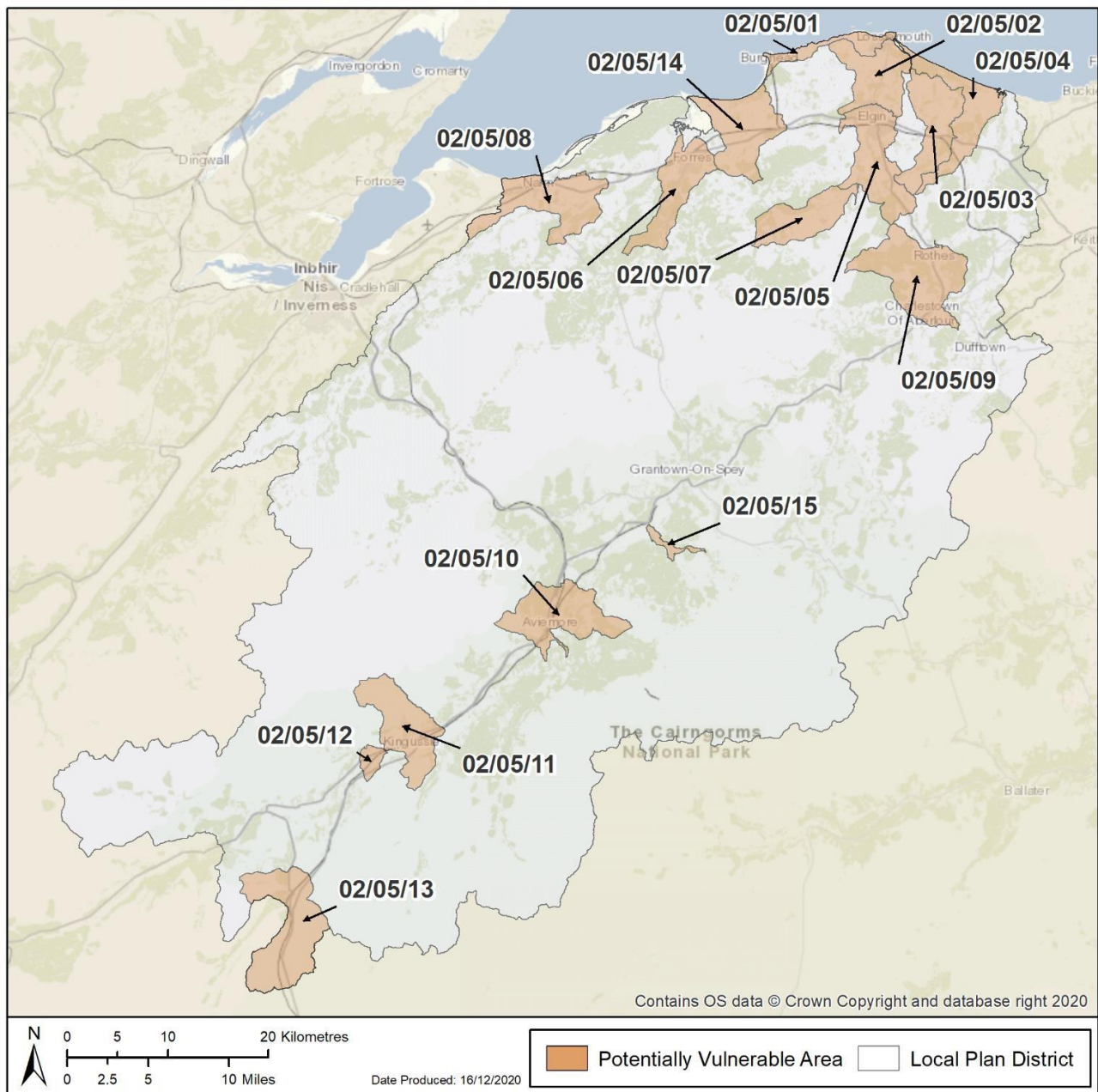
	<b>Scottish Flood Defence Asset Database</b>
<b>Action</b>	The Scottish Flood Defence Asset Database provides information on existing flood protection schemes. National data on flood protection infrastructure is needed to understand flood risk and to develop adaptation planning for Scotland. SEPA will continue to host SFDAD and look for opportunities to support the development of our understanding of how and when Scotland's flood defence assets should be adapted to continue to maintain protection from flooding in the future.

	<b>Self help</b>
<b>Action</b>	<p>Everyone is responsible for protecting themselves and their property from flooding. People can take 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. The following places offer help with taking steps to protect yourself:</p> <p><a href="https://www.floodre.co.uk/">https://www.floodre.co.uk/</a></p> <p><a href="https://www.biba.org.uk/current-issues/flood-insurance/">https://www.biba.org.uk/current-issues/flood-insurance/</a></p> <p><a href="https://floodlinescotland.org.uk/">https://floodlinescotland.org.uk/</a></p> <p><a href="https://scottishfloodforum.org/">https://scottishfloodforum.org/</a></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>

More specific local actions to manage flood risk in target areas are detailed in the potentially vulnerable areas (PVAs) sections below.

## 2.3 Potentially vulnerable areas

Potentially vulnerable areas (PVAs) were designated 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 (available to view at: <https://www.sepa.org.uk/data-visualisation/nfra2018/>). As part of continued analysis of flood risk, the national flood risk assessment and potentially vulnerable areas (PVAs) will be reviewed every 6 years to take on board any new information. There are 15 potentially vulnerable areas (PVAs) in this Local Plan District. Following sections provide more information on these areas.



**Figure 1. Potentially vulnerable areas in Findhorn, Nairn and Speyside Local Plan District**

## LPD 5 Findhorn, Nairn and Speyside – List of PVAs

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

PVA Ref	PVA Name	Local authority	Page number
02/05/01	<a href="#">Burghead to Lossiemouth</a>	Moray	34
02/05/02	<a href="#">Spynie</a>	Moray	39
02/05/03	<a href="#">Lhanbryde</a>	Moray	43
02/05/04	<a href="#">Kingston and Garmouth</a>	Moray	46
02/05/05	<a href="#">Elgin</a>	Moray	51
02/05/06	<a href="#">Forres</a>	Moray	55
02/05/07	<a href="#">Dallas</a>	Moray	59
02/05/08	<a href="#">Nairn</a>	Highland	62
02/05/09	<a href="#">Rothes and Aberlour</a>	Moray	69
02/05/10	<a href="#">Aviemore</a>	Highland	76
02/05/11	<a href="#">Kingussie</a>	Highland	79
02/05/12	<a href="#">Newtonmore</a>	Highland	82
02/05/13	<a href="#">Dalwhinnie</a>	Highland	86
02/05/14	<a href="#">Kinloss</a>	Moray	89
02/05/15	<a href="#">Nethy Bridge</a>	Highland	93

## 02/05/01 (Burghead to Lossiemouth)

This area is designated as a potentially vulnerable area due to the risk of surface water flooding to Hopeman and the risk of coastal flooding to Lossiemouth. Both areas have a history of past flooding.

There are 2 target areas in this potentially vulnerable area, which have been the focus of further assessment, these are listed below. Further information on the objectives and actions to manage flood risk within this area is provided below.

### List of target areas

Hopeman	(target area 389)
Lossiemouth	(target area 391)

## Hopeman (target area 389)

### Summary

Hopeman is located along the southern shore of the Moray Firth and is within the Moray Council area. The main source of flooding in the area is surface water flooding. There are approximately 180 people and 110 homes and businesses currently at risk from flooding. This is likely to increase to 240 people and 150 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, and this national assessment has highlighted the risk of surface water flooding in this target area. Hopeman has therefore been identified as a new target area for the 2021 flood risk management plans. The national assessment is improved for surface water flooding by the development of private works to reduce the risk of surface water flooding in the Hopeman area. Heavy rainfall is known to run off the steep surrounding hills overwhelming the local drainage systems. There are frequent records of surface water flooding in Hopeman, including floods during August and October 2014.

## 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
3891	Avoid flood risk	Avoid inappropriate development that increases flood risk in Hopeman.
3892	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of flood protection works at Hopeman.
3893	Improve data and understanding	Improve data and understanding of the performance of the flood protection asset in Hopeman.
3894	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Hopeman.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood defence maintenance (Ref: 38901)	
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Description	Continue to maintain the flood protection works at Hopeman. The scheme is to be maintained by the current landowner.
Sewer flood risk assessment (Ref: 38902)	
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
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Lossiemouth 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.
Flood warning maintenance (Ref: 38903)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should maintain the Moray Firth coastal flood warning scheme.

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.

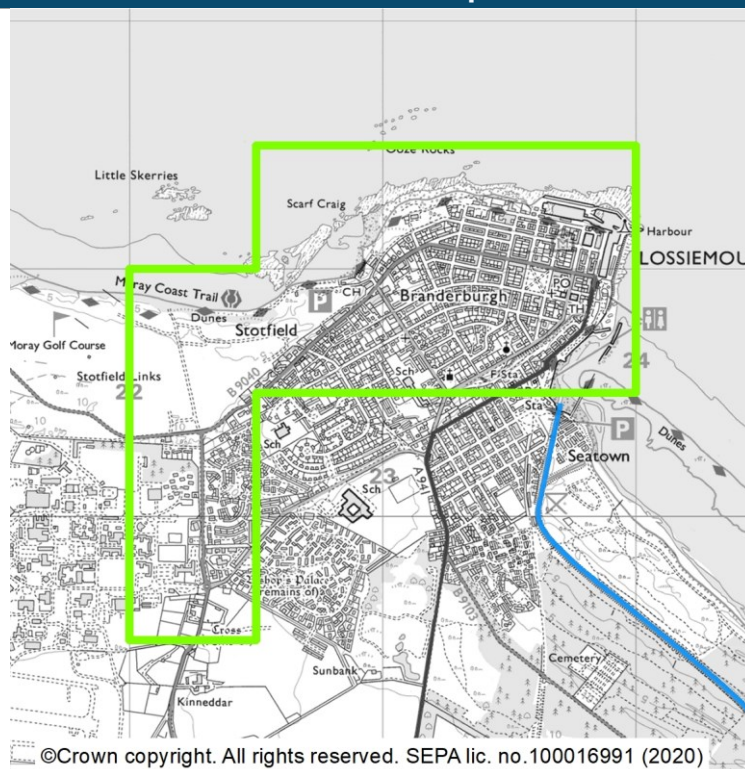
# Flood risk management plan datasheet

## Lossiemouth (target area 391)

### Summary

Lossiemouth is located on the southern shore of the Moray Firth south and is within the Moray Council area. The main source of flooding in Lossiemouth is coastal flooding. There are approximately 140 people and 90 homes and businesses currently at risk from flooding. This is estimated to increase to 200 people and 130 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 improved for coastal flooding by the development and operation of the Moray Firth flood warning scheme. There is a long history of coastal flooding in Lossiemouth.

The Dynamic Coast project has shown that parts of the shoreline in or adjacent to this target area are subject to erosion at present or are considered likely to erode in the future. Consideration should be given to how erosion might impact flood risk. Any actions taken should aim to support building natural resilience to flooding and not lead to an increase in erosion.

## 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
3911	Avoid flood risk	Avoid inappropriate development that increases flood risk in Lossiemouth.
3912	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Lossiemouth.
3913	Reduce flood risk	Reduce the risk of coastal flooding to Lossiemouth.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Sewer flood risk assessment (Ref: 39101)	
<b>Action</b>	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
<b>Description</b>	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Lossiemouth 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.
Strategic mapping improvements (Ref: 39102)	
<b>Action</b>	SEPA will continue to update flood maps based on new information.
<b>Description</b>	SEPA has undertaken improved coastal modelling in this target area including taking account of the impact of waves on coastal flooding. We will complete and publish the outcomes of this modelling work to inform decision making with respect to flooding at the coast.
Flood warning maintenance (Ref: 39103)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the Moray Firth coastal flood warning scheme.

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.

## 02/05/02 (Spynie)

This area is designated as a potentially vulnerable area due to the risk of coastal flooding to the Seatown area of Lossiemouth. There is a history of flooding in the area, recently caused by combined coastal and river flooding.

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

### List of target areas

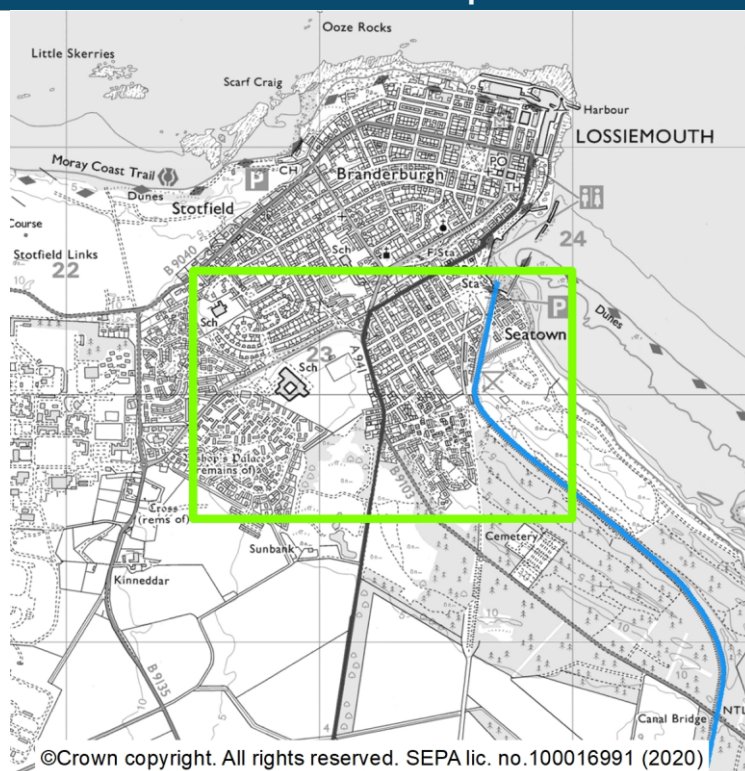
Seatown, Lossiemouth (target area 9991)

## Seatown, Lossiemouth (target area 9991)

### Summary

Seatown is an area of Lossiemouth, facing onto the River Lossie estuary, in the Moray Council area. The main source of flooding in Seatown is coastal flooding. There are approximately 390 people and 200 homes and businesses currently at risk of flooding. This is likely to increase to 490 people and 250 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 improved for coastal flooding by the Lossiemouth Coastal Flood Study. There are records of coastal flooding in the Seatown area of Lossiemouth including floods in December 2012.

The Dynamic Coast project has shown that parts of the shoreline in or adjacent to this target area are subject to erosion at present or are considered likely to erode in the future. Consideration should be given to how erosion might impact flood risk. Any actions taken should aim to support building natural resilience to flooding and not lead to an increase in erosion.

### 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
99911	Avoid flood risk	Avoid inappropriate development that increases flood risk in the Seatown area of Lossiemouth.
99912	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in the Seatown area of Lossiemouth.
99913	Reduce flood risk	Reduce the risk of coastal flooding to the Seatown area of Lossiemouth.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood scheme or works design (Ref: 999101)	
<b>Action</b>	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.
<b>Description</b>	<p>Further development of the preferred option will be required prior to commencing with the detailed design. This is to address current and future flood risk. The need for an adaptation plan should also be assessed.</p> <p>The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.</p> <p>In accordance with the flood risk management plan, as part of the scheme or works, the responsible authority should aim to ensure the action will not have an adverse effect on the integrity of the Moray Firth Special Area of Conservation and Special Protection Area, and the Lower River Spey - Spey Bay Special Area of Conservation.</p>

Flood scheme or works implementation (Ref: 999102)	
<b>Action</b>	The flood scheme/works is to be built following agreement of the design, costs and timescales.
<b>Description</b>	<p>Progress the Seatown Flood Protection Scheme based on the detailed design. As built drawings should be made available to SEPA, for consideration in the Scottish Flood Defence Asset Database, flood map improvements and flood warning scheme updates.</p> <p>The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.</p>

Community engagement (Ref: 999103)	
<b>Action</b>	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
<b>Description</b>	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of the flood protection scheme.

<b>Sewer flood risk assessment (Ref: 999104)</b>	
<b>Action</b>	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
<b>Description</b>	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Lossiemouth 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.
<b>Flood warning maintenance (Ref: 999105)</b>	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the Moray Firth coastal flood warning scheme.
<b>Strategic mapping improvements (Ref: 999106)</b>	
<b>Action</b>	SEPA will continue to update flood maps based on new information.
<b>Description</b>	SEPA has undertaken improved coastal modelling in this target area including taking account of the impact of waves on coastal flooding. We will complete and publish the outcomes of this modelling work to inform decision making with respect to flooding at the coast.

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.



## 02/05/03 (Lhanbryde)

This area is designated as a potentially vulnerable area due to the risk of river flooding in Lhanbryde. This has been reduced by the Lhanbryde Flood Alleviation Scheme and incidents of flooding have been infrequent since its completion.

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

### List of target areas

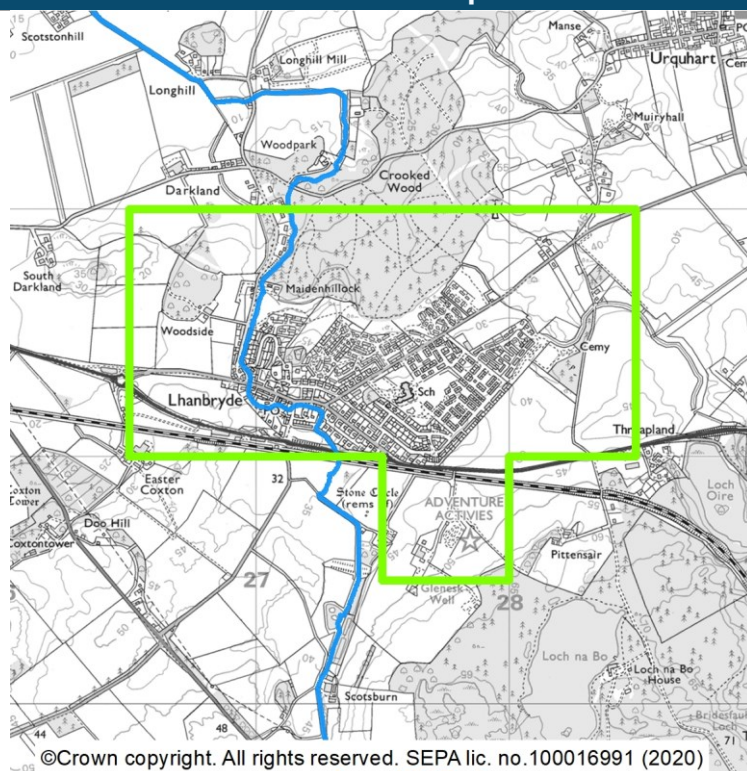
Lhanbryde (target area 390)

## Lhanbryde (target area 390)

### Summary

Lhanbryde is located east of Elgin in the Moray Council area. The national assessment estimates that there are approximately 180 people and 100 homes and businesses at risk from flooding. The Lhanbryde Flood Protection Scheme benefits an estimated 30 homes and 5 businesses up to a 1 in 100 year standard of protection. The number of people, homes and businesses at risk is expected to increase by approximately 10% 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 underpinned for river flooding by the design of the Lhanbryde Flood Protection Scheme (2005) and is improved for surface water flooding by a sewer flood risk assessment. There were frequent records of flooding prior to completion of the flood scheme including notable floods in 1997. Since completion, surface water flooding has been recorded, and there are also records of floods in nearby areas not protected by the scheme.

### 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
3901	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Lhanbryde Flood Alleviation Scheme.
3902	Avoid flood risk	Avoid inappropriate development that increases flood risk in Lhanbryde.
3903	Improve data and understanding	Improve data and understanding of the performance of the Lhanbryde Flood Alleviation Scheme.
3904	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Lhanbryde.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood defence maintenance (Ref: 39001)	
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Description	The Lhanbryde Flood Alleviation Scheme should be maintained as per the design requirements in order to continue to reliably provide the appropriate level of protection.
Flood study (existing flood defences) (Ref: 39002)	
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Description	Assess the performance of the Lhanbryde Flood Alleviation Scheme. This is because our understanding of hydrology and climate change has improved since the construction of the scheme in 2005. The need for an adaptation plan should be evaluated. The impact of the sediment trap on the channel should be assessed as part of this.
Sewer flood risk assessment (Ref: 39003)	
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
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Lossiemouth 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.

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.

## 02/05/04 (Kingston and Garmouth)

This area is designated as a potentially vulnerable area due to the risk of coastal flooding to Kingston and the risk of river flooding to Garmouth. Sea level rise as a result of climate change is expected to increase the risk of flooding. Recent flooding has been caused by river and coastal flooding.

There are 2 target areas in this potentially vulnerable area, which have been the focus of further assessment, these are listed below. Further information on the objectives and actions to manage flood risk within this area is provided below.

### List of target areas

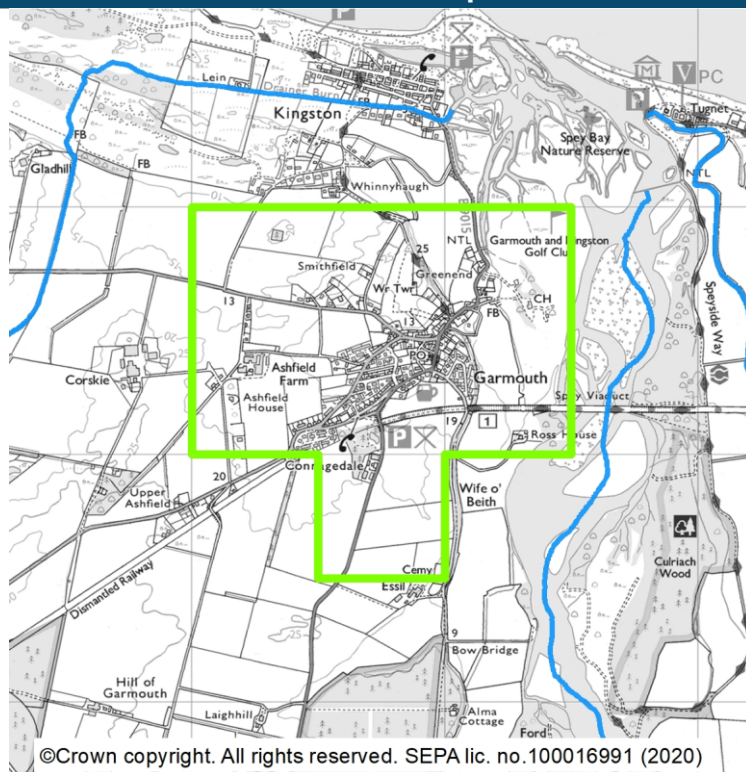
Garmouth	(target area 393)
Kingston	(target area 463)

## Garmouth (target area 393)

### Summary

Garmouth is located near the mouth of the River Spey within in the Moray Council area. The main source of flooding in Garmouth is the River Spey. There is also a risk of surface water and coastal flooding. Combined river and coastal flooding may also be an issue. There are approximately 80 people and 50 homes and businesses currently at risk from flooding. A local assessment indicates that this may be over-estimated. This is estimated to increase to 90 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 is improved by studies and inspections carried out by Moray Council. Understanding of both river and coastal flooding is improved by the development and operation of the Moray Firth and the River Spey flood warning schemes. The understanding of surface water flooding is improved by a sewer flood risk assessment. There are frequent records of flooding in Garmouth.

## 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
3931	Avoid flood risk	Avoid inappropriate development that increases flood risk in Garmouth.
3932	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Garmouth.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Adaptation plan (Ref: 39301)	
<b>Action</b>	Information on climate change is to be used to develop an adaptation plan to allow for the impacts of climate change to be monitored, understood and managed.
<b>Description</b>	An adaptation plan should be developed in conjunction with community engagement. The plan should consider the current and future flood risk to receptors and assets and consider how they can be modified to manage the flood risk or removed from the flood risk.

Flood warning maintenance (Ref: 39302)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the River Spey and the Moray Firth coastal flood warning schemes.

## 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 warning maintenance (Ref: 39303)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should investigate improvements to the River Spey flood warning scheme.

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.

## Coordination with the river basin management plan

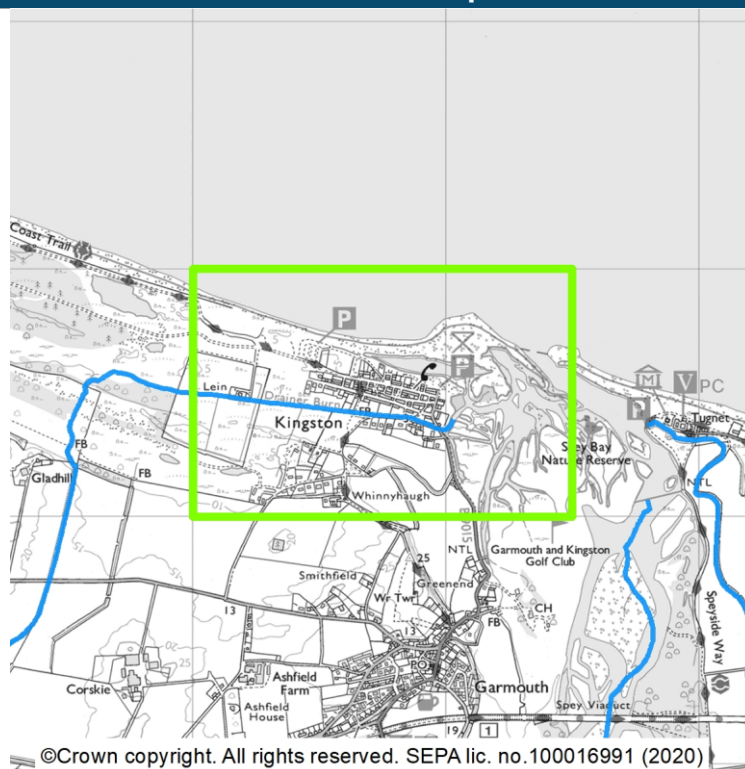
This area has been identified as having potential for restoration in Scotland's river basin management plan. Actions should be coordinated to deliver any potential joint objectives for restoration and flood risk management. This should be considered in the earliest stages of any projects.

## Kingston (target area 463)

### Summary

Kingston is located on the Moray Firth by the west bank of the River Spey as it flows into Spey Bay. It is in the Moray Council area. The main source of flooding in Kingston is coastal flooding. The area is particularly vulnerable to erosion and the River mouth shifts periodically. There are approximately 30 people and 20 homes and businesses currently at risk of flooding. Based on a local assessment, this may be overestimated. This is likely to increase to 70 people and 40 homes and businesses by the 2080's 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 improved for coastal flood risk by the Moray Firth flood warning scheme. The understanding of flood risk is also being improved by monitoring of the shingle bank in front of Kingston. There are frequent records of coastal flooding. The access roads are often affected, resulting in Kingston being cut off from the surrounding 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
4631	Avoid flood risk	Avoid inappropriate development that increases flood risk in Kingston.
4632	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Kingston.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Data collection (Ref: 46301)	
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.
Description	The shingle bank in front of Kingston should be monitored in line with the study recommendations. Once the bank is within 25m of the landline, the actions outlined in the adaptation plan (to be developed) should be implemented.
Adaptation plan (Ref: 46302)	
Action	Information on climate change is to be used to develop an adaptation plan to allow for the impacts of climate change to be monitored, understood and managed.
Description	Climate change is expected to cause rising sea levels and changes to storm patterns. This could lead to flooding happening more often and changes to erosion. It is important to plan for this and ensure future risk to communities and infrastructure is managed appropriately. An adaptation plan should be developed in conjunction with community engagement and the monitoring strategy for the shingle bank. The plan should consider the current and future flood risk to receptors and assets and consider how they can be modified to manage the flood risk or removed from the flood risk.
Flood warning maintenance (Ref: 46303)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should maintain the River Spey and the Moray Firth coastal flood warning schemes.

## 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 warning maintenance (Ref: 46304)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should investigate improvements to the River Spey flood warning scheme.

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.

## 02/05/05 (Elgin)

Elgin is designated as a potentially vulnerable area due to the risk of river and surface water flooding. The Elgin Flood Protection Scheme benefits over 800 properties. Recent flooding occurred in August 2019 as a result of surface water flooding.

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

### List of target areas

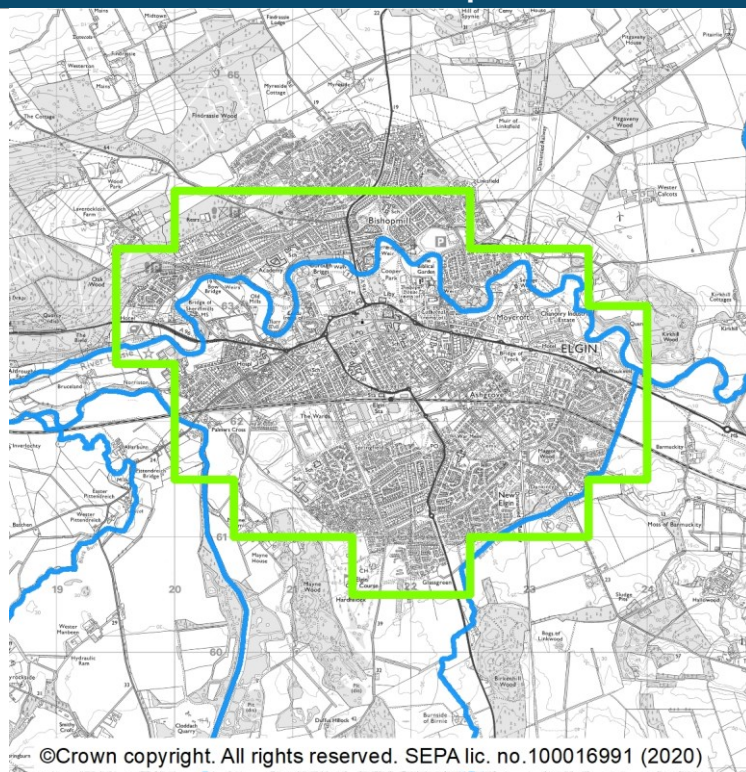
Elgin (target area 392)

## Elgin (target area 392)

### Summary

Elgin is located in the north of Scotland on the banks of the River Lossie in the Moray Council area. The main sources of flooding in Elgin are river and surface water flooding. There are approximately 1,200 people and 780 homes and businesses currently at risk from flooding. This is likely to increase to 3,400 people and 2,000 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 improved for flooding from the River Lossie due to the development of the Elgin Flood Alleviation Scheme and the River Lossie flood warning scheme. The understanding of surface water flood risk is improved by the Moray Surface Water Management Plan. There is a long history of river flooding in the Elgin target area including notable floods prior to the construction of the flood scheme in July 1997 and in November 2002. There are also records of surface water flooding, including recent flash floods in August 2019.

## 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
3921	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Elgin Flood Protection Scheme.
3922	Avoid flood risk	Avoid inappropriate development that increases flood risk in Elgin.
3923	Improve data and understanding	Improve data and understanding of the performance of the flood protection assets in Elgin.
3924	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Elgin.
3925	Reduce flood risk	Reduce the risk of surface water flooding in Elgin.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood defence maintenance (Ref: 39201)	
<b>Action</b>	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
<b>Description</b>	Continue to maintain the Elgin Flood Alleviation Scheme.

Flood study (existing flood defences) (Ref: 39202)	
<b>Action</b>	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
<b>Description</b>	Assess the performance of the Elgin Flood Alleviation Scheme. This is because new climate change data has become available since the construction of the scheme. The need for an adaptation plan should be evaluated.

Flood scheme or works design (Ref: 39203)	
<b>Action</b>	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.
<b>Description</b>	<p>Works are proposed to address flood risk from surface water in Elgin. Further work may be required to determine business case prior to progressing to detailed design. The detailed design for the flood works identified in the surface water management plan should be progressed. Proposals could include development of new overland flood paths, installation of non-return valves and road reprofiling.</p> <p>The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.</p>

Community engagement (Ref: 39204)	
<b>Action</b>	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
<b>Description</b>	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of works identified in the surface water management plan.

Flood scheme or works implementation (Ref: 39205)	
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Description	<p>Progress the flood works based on the detailed design to reduce surface water flood risk in Elgin.</p> <p>The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.</p>
Sewer flood risk assessment (Ref: 39206)	
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
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Lossiemouth 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.
Surface water management plan (Ref: 39207)	
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.
Description	Continue to develop and implement the surface water management plan, working with Scottish Water as appropriate.
Flood warning maintenance (Ref: 39208)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should maintain the River Lossie flood warning scheme.

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.

## 02/05/06 (Forres)

Forres is designated as a potentially vulnerable area due to the risk of river and surface water flooding. Forres benefits from 2 flood protection schemes, one on the Burn of Mosset and the other on the River Findhorn.

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

### List of target areas

Forres (target area 427)

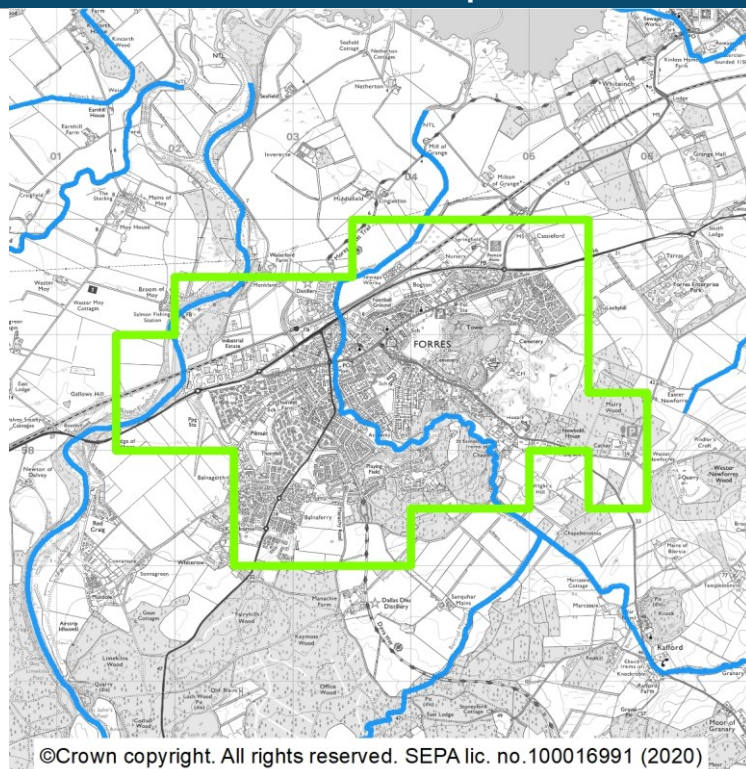


## Forres (target area 427)

### Summary

Forres is located in the north east of Scotland and is within the Moray Council area. The main source of flooding in Forres is surface water flooding. However there is also a risk of river flooding, which is largely managed by the 2 flood schemes. There are approximately 2,000 people and 1,000 homes and businesses currently at risk from flooding. This is likely to increase to 2,400 people and 1,200 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 improved for river flooding by the studies to develop the Forres (River Findhorn and Pilmuir) and the Forres (Burn of Mosset) Flood Alleviation Schemes. The understanding of surface water flood risk is improved by the Moray Surface Water Management Plan. Prior to the development of the flood protection schemes there was a long history of river flooding in Forres, including notable flooding in 1997 when the Burn of Mosset burst its banks. There are frequent records of surface water 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
4271	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Forres (Burn of Mosset) Flood Prevention Scheme 2005 and the Forres (Findhorn and Pilmuir) Flood Prevention Scheme 2008.
4272	Avoid flood risk	Avoid inappropriate development that increases flood risk in Forres.
4273	Improve data and understanding	Improve data and understanding of the performance of the flood protection assets in Forres.
4274	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Forres.
4275	Reduce flood risk	Reduce the risk of surface water flooding in Forres.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood defence maintenance (Ref: 42701)	
<b>Action</b>	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
<b>Description</b>	Continue to maintain the Forres (Burn of Mosset, 2005) Flood Alleviation Scheme and the Forres (Findhorn and Pilmuir, 2008) Flood Alleviation Scheme.

Flood study (existing flood defences) (Ref: 42702)	
<b>Action</b>	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
<b>Description</b>	Assess the performance of the Forres (Burn of Mosset, 2005) Flood Alleviation Scheme and the Forres (Findhorn and Pilmuir, 2008) Flood Alleviation Scheme. This is because new climate change data has become available since the construction of the scheme. The need for an adaptation plan should be evaluated.

Sewer flood risk assessment (Ref: 42703)	
<b>Action</b>	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
<b>Description</b>	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Forres 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.

Surface water management plan (Ref: 42704)	
<b>Action</b>	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.
<b>Description</b>	Continue to develop and implement the surface water management plan, working with Scottish Water as appropriate.

Flood warning maintenance (Ref: 42705)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should maintain the River Findhorn flood warning scheme.

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.

### Coordination with the river basin management plan

This area has been identified as having potential for restoration in Scotland's river basin management plan. Actions should be coordinated to deliver any potential joint objectives for restoration and flood risk management. This should be considered in the earliest stages of any projects.

## 02/05/07 (Dallas)

This area is designated as a potentially vulnerable area due to a large proportion of Dallas being at risk of flooding from the River Lossie. Recent floods have occurred as a result of river flooding. Moray Council delivered flood protection works to benefit properties, however, surrounding roads remain at risk of flooding.

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

### List of target areas

Dallas (target area 421)

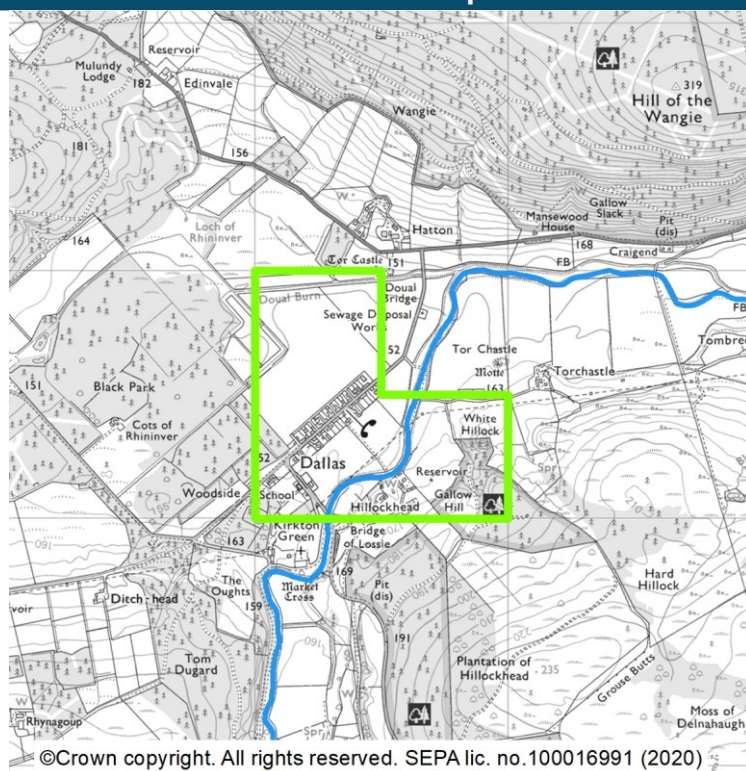
# Flood risk management plan datasheet

## Dallas (target area 421)

### Summary

Dallas is south west of Elgin on the banks of the River Lossie. It is within the Moray Council area. The main source of flooding in Dallas is river flooding. There are approximately 30 people and 20 homes and businesses currently at risk from flooding. This is likely to increase to 40 people and 30 homes and businesses by the 2080s due to climate change. Dallas benefits from a flood protection embankment, which reduces flood risk from the River Lossie.

### 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 national assessment has highlighted the risk of flooding from the River Lossie to a significant proportion of the community in Dallas. Access roads are also at risk. Dallas has therefore been identified as a new target area for the 2021 flood risk management plans. The national assessment of flooding from the River Lossie has improved through the Dallas Flood Appraisal Study (2016) which identified the option of a set-back embankment to reduce flood risk. The embankment was built in 2017. Prior to its construction there was periodic flooding from the River Lossie in the Dallas 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
4211	Avoid flood risk	Avoid inappropriate development that increases flood risk in Dallas.
4212	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Dallas Flood Prevention Scheme.
4213	Improve data and understanding	Improve data and understanding of the performance of the flood protection asset in Dallas.
4214	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Dallas.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood defence maintenance (Ref: 42101)	
<b>Action</b>	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
<b>Description</b>	Continue to maintain the existing flood defences in Dallas.

Flood warning maintenance (Ref: 42102)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the River Lossie flood warning scheme.

## 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 (existing flood defences) (Ref: 42103)	
<b>Action</b>	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
<b>Description</b>	Assess the performance of the existing flood defences in Dallas. The impacts of climate change on flood risk should also be considered. As built drawings should be made available to SEPA, for inclusion in the Scottish Flood Defence Asset Database.

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.

## 02/05/08 (Nairn)

Nairn is designated as a potentially vulnerable area due to the risk of river, coastal and surface water flooding. The main sources of river flooding are the River Nairn and Auldearn Burn. Coastal wave overtopping has recently caused minor flooding in Nairn.

There are 2 target areas in this potentially vulnerable area, which have been the focus of further assessment, these are listed below. Further information on the objectives and actions to manage flood risk within this area is provided below.

### List of target areas

Nairn	(target area 428)
Newmill (Nairn)	(target area 9992)

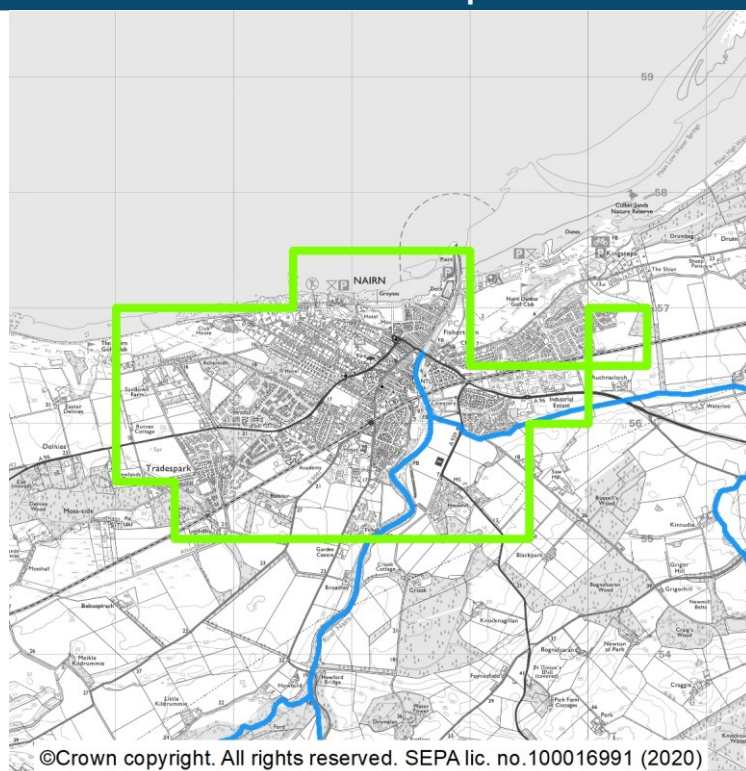


## Nairn (target area 428)

### Summary

Nairn is located along the southern shore of the Moray Firth in the Highland Council area. Nairn is at risk from river, coastal and surface water flooding. There are approximately 1,300 people and 760 homes and businesses currently at risk from flooding. This is likely to increase to 1,700 people and 990 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 improved for coastal flooding by the operation and maintenance of the Moray Firth flood warning scheme. Understanding of surface water flooding is improved for surface water by a sewer flood risk assessment. There is a long history of periodic flooding recorded in Nairn from the River Nairn and the Auldearn Burn. There are also records of flooding to Harbour Street caused by combined high tide and river levels.

The Dynamic Coast project has shown that parts of the shoreline in or adjacent to this target area are subject to erosion at present or are considered likely to erode in the future. Consideration should be given to how erosion might impact flood risk. Any actions taken should aim to support building natural resilience to flooding and not lead to an increase in erosion.

## 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
4281	Avoid flood risk	Avoid inappropriate development that increases flood risk in Nairn.
4282	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Nairn.
4283	Reduce flood risk	Reduce the risk of flooding from the sea, River Nairn, Auldearn Burn and Alton Burn in Nairn.
4284	Reduce flood risk	Reduce the risk of surface water flooding in Nairn.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood study (Ref: 42801)	
<b>Action</b>	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.
<b>Description</b>	The Highland Council to develop a coastal flood model and a flood model of the River Nairn and Auldearn Burn to determine the extent of flood risk to Nairn. Subject to the outcome of the modelling an appraisal of options to mitigate flooding will be carried out, determining a preferred option. The Highland Council to explore working with SEPA due to the potential River Basin Management Planning objectives for the Auldearn Burn.
Strategic mapping improvements (Ref: 42802)	
<b>Action</b>	SEPA will continue to update flood maps based on new information.
<b>Description</b>	SEPA has undertaken improved coastal modelling in this target area including taking account of the impact of waves on coastal flooding. We will complete and publish the outcomes of this modelling work to inform decision making with respect to flooding at the coast.
Flood warning maintenance (Ref: 42803)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the Moray Firth coastal and River Nairn flood warning schemes.

## 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: 42804)	
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.
Description	The Highland Council to develop a flood model of the Alton Burn to determine the extent of flood risk to parts of Nairn from the burn. Subject to the outcome of the modelling an appraisal of options to mitigate flooding will be carried out, determining a preferred option.

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.

## Coordination with the river basin management plan

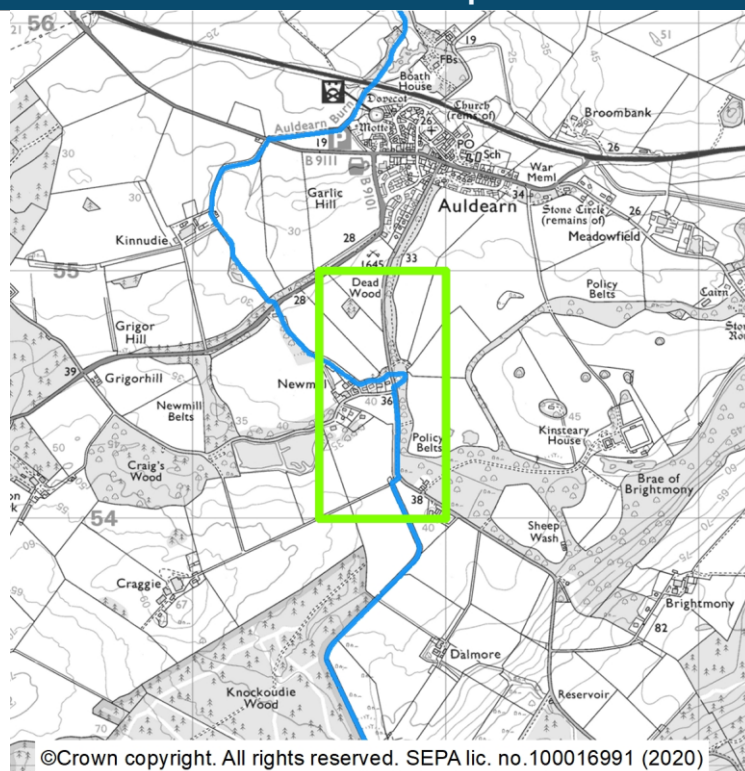
This area has been identified as having potential for restoration in Scotland's river basin management plan. Actions should be coordinated to deliver any potential joint objectives for restoration and flood risk management. This should be considered in the earliest stages of any projects.

## Newmill (Nairn) (target area 9992)

### Summary

Newmill is a village to the south east of Nairn in the Highland Council area. Newmill is at risk from river and surface water flooding. There is also a risk of surface water flooding. There are approximately 20 people and 10 properties currently at risk of flooding, which is a significant proportion of the community. This is unlikely to increase significantly 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, and this national assessment has highlighted the risk of flooding in this target area. There are limited records of flooding in the Newmill (Nairn) 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
99921	Avoid flood risk	Avoid inappropriate development that increases flood risk in Newmill.
99922	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Newmill.
99923	Reduce flood risk	Reduce the risk of flooding in Newmill from the Auldearn Burn.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood risk management review (Ref: 999201)	
<b>Action</b>	During each 6 year planning cycle, we update our understanding of flooding to include all new data and information that has become available. This includes information on any flooding that has happened and the latest predictions on the impacts of climate change. The updated understanding is used to set any appropriate objectives and actions for areas at risk of flooding.
<b>Description</b>	No local actions specific to this target area have been identified yet. There are national actions planned that will cover this area, including an update to SEPA's surface water flood maps and an update to the national flood risk assessment. These, along with other actions that are carried out across the whole local plan district covering this area, will help to manage flood risk in the long term. The need for actions for this area will be reviewed again in 2026.

## 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: 999202)	
<b>Action</b>	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.
<b>Description</b>	The Highland Council to develop a flood model of the Auldearn Burn to determine the extent of flood risk to Newmill from the burn. Subject to the outcome of the modelling an appraisal of options to mitigate flooding will be carried out, determining a preferred option.

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.

## Coordination with the river basin management plan

This area has been identified as having potential for restoration in Scotland's river basin management plan. Actions should be coordinated to deliver any potential joint objectives for restoration and flood risk management. This should be considered in the earliest stages of any projects.

## 02/05/09 (Rothes and Aberlour)

This area is designated as a potentially vulnerable area due to the risk of surface water flooding in Aberlour and Rothes. River flood risk (including from the Back Burn, Burn of Rothes and Black Burn) is managed by the Rothes Flood Protection Scheme.

There are 2 target areas in this potentially vulnerable area, which have been the focus of further assessment, these are listed below. Further information on the objectives and actions to manage flood risk within this area is provided below.

### List of target areas

<a href="#">Rothes</a>	<a href="#">(target area 397)</a>
<a href="#">Aberlour</a>	<a href="#">(target area 432)</a>



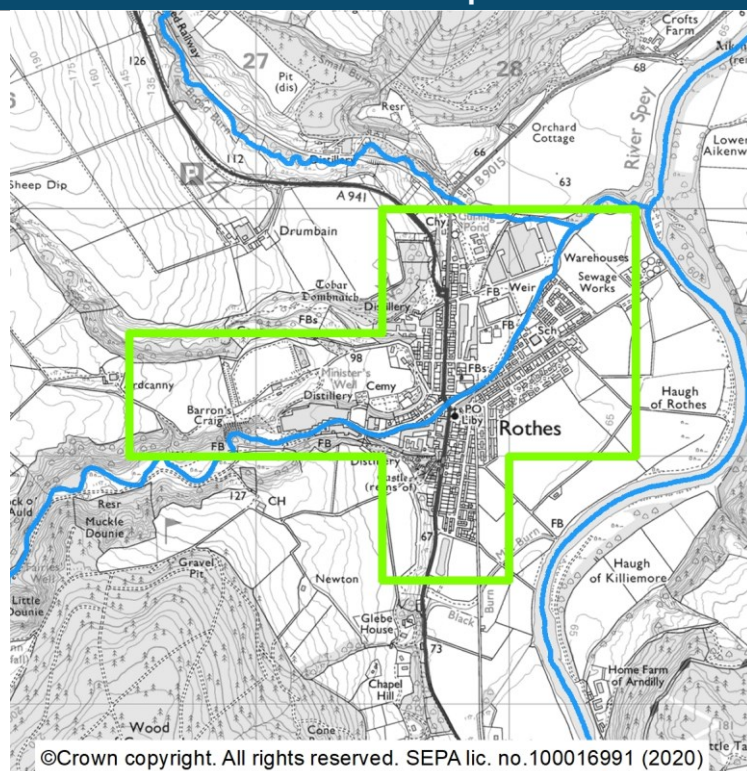
# Flood risk management plan datasheet

## Rothies (target area 397)

### Summary

Rothies is on the banks of the River Spey and is within the Moray Council area. The main source of flooding in Rothies is from surface water flooding, however there is also a risk from river flooding. There are approximately 780 people and 520 homes and businesses currently at risk from flooding, which is a significant proportion of the community. This is likely to increase to 830 people and 560 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 improved for surface water by the Moray Surface Water Management Plan. The understanding of flood risk from the Burn of Rothies, Back Burn and Black Burn is underpinned by the studies to develop the Rothies Flood Protection Scheme. The understanding of flood risk from the River Spey is improved by the development and operation of the Spey flood warning scheme. There is a long history of flooding in Rothies, including notable flooding in September 2009 from the River Spey, the Back Burn and the Burn of Rothies, prior to the completion of the Rothies Flood Protection Scheme.

## 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
3971	Avoid flood risk	Avoid inappropriate development that increases flood risk in Rothies.
3972	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Rothies Flood Prevention Schemes.
3973	Improve data and understanding	Improve data and understanding of the performance of the flood protection assets in Rothies.
3974	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Rothies.
3975	Reduce flood risk	Reduce the risk of surface water flooding to Rothies.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood scheme or works design (Ref: 39701)	
<b>Action</b>	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.
<b>Description</b>	<p>The selected preferred approach for managing surface water 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.</p> <p>The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.</p> <p>In accordance with the flood risk management plan, as part of the scheme or works, the responsible authority should aim to ensure that the action will not have an adverse effect on the integrity of the River Spey Special Area of Conservation.</p>

Community engagement (Ref: 39702)	
<b>Action</b>	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
<b>Description</b>	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of works identified in the surface water management plan.

Flood scheme or works implementation (Ref: 39703)	
<b>Action</b>	The flood scheme/works is to be built following agreement of the design, costs and timescales.
<b>Description</b>	<p>The Surface Water flood scheme/works is to be built following agreement of the design, costs and timescales.</p> <p>The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.</p>

Flood defence maintenance (Ref: 39704)	
<b>Action</b>	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
<b>Description</b>	Continue to maintain the Rothes Flood Protection Scheme (2011).

Flood study (existing flood defences) (Ref: 39705)	
<b>Action</b>	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
<b>Description</b>	Assess the performance of the Rothes Flood Protection Scheme (2011). This is because new climate change data has become available since the construction of the scheme. The need for an adaptation plan should be evaluated.

Flood warning maintenance (Ref: 39706)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the River Spey flood warning scheme.

## 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 warning maintenance (Ref: 39707)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should investigate improvements to the River Spey flood warning scheme.

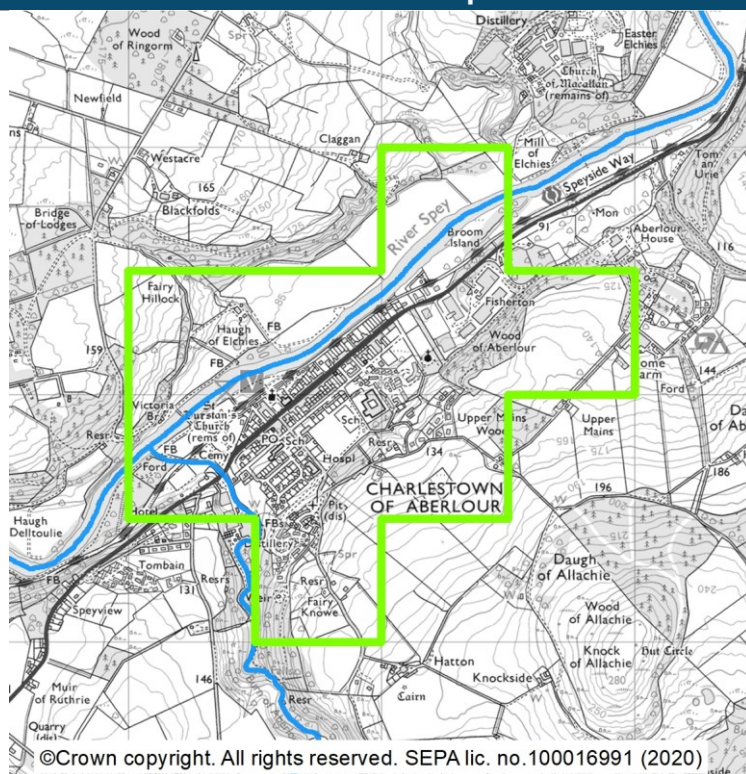
SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places, 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.

## Aberlour (target area 432)

### Summary

Aberlour lies 20km south of Elgin and is within the Moray Council Area. The main source of flooding in Aberlour is surface water flooding, however there is also risk of river flooding. There are approximately 130 people and 90 homes and businesses currently at risk from flooding. This is likely to increase to 140 people and 110 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 improved for surface water flooding by the Moray Surface Water Management Plan. Understanding is improved for river flooding by the development and operation of the River Spey flood warning scheme. There is a long history of flooding in the Aberlour 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
4321	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Aberlour - Moray Flood Prevention Scheme 1984.
4322	Avoid flood risk	Avoid inappropriate development that increases flood risk in Aberlour.
4323	Improve data and understanding	Improve data and understanding of the Aberlour - Moray Flood Prevention Scheme 1984.
4324	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Aberlour.
4325	Reduce flood risk	Reduce the risk of surface water flooding to Aberlour.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood study (existing flood defences) (Ref: 43201)	
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Description	Assess the performance of the Aberlour Flood Protection Scheme. The scheme was designed in the 1980s. Since then new modelling techniques and data have emerged. The impacts of climate change on flood risk should also be considered. The need for an adaptation plan should be evaluated.
Surface water management plan (Ref: 43202)	
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Description	Implement the surface water management plan, working with Scottish Water as appropriate. This may be progressed further as part of the flood study and a wider adaptation plan for Aberlour.
Flood defence maintenance (Ref: 43203)	
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Description	Continue to maintain the Aberlour Flood Protection Scheme.
Flood warning maintenance (Ref: 43204)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should maintain the River Spey flood warning scheme.

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 warning maintenance (Ref: 43205)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should investigate improvements to the River Spey flood warning scheme.

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.

## 02/05/10 (Aviemore)

Aviemore is designated as a potentially vulnerable area due to the risk of flooding from the River Spey, Aviemore Burn and from surface water. Recent flooding was caused by rivers.

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

### List of target areas

Aviemore (target area 396)

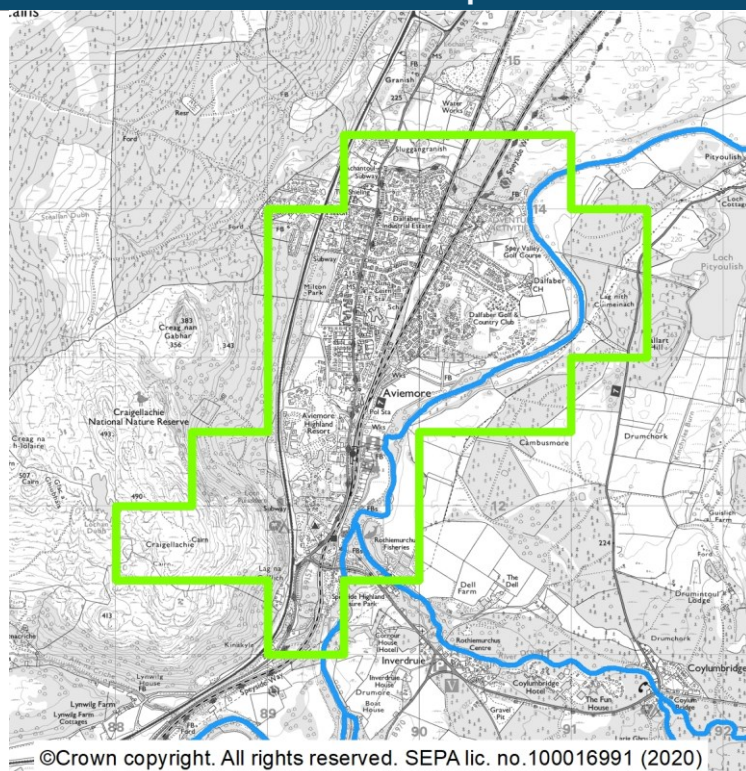


## Aviemore (target area 396)

### Summary

Aviemore is in the Cairngorms National Park on the banks of the River Spey. It is within the Highland Council area. Aviemore is at risk from river and surface water flooding. There are approximately 430 people and 240 homes and businesses currently at risk from flooding. This is likely to increase to 490 people and 270 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 development and operation of the River Spey flood warning scheme. The understanding of surface water flooding is improved by a sewer flood risk assessment. There is a long history of flooding in Aviemore from the River Spey including a notable flood in December 2015 when the River Spey overflowed its banks during Storm Desmond. There are also records of flooding from the Aviemore Burn.

## 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
3961	Avoid flood risk	Avoid inappropriate development that increases flood risk in Aviemore.
3962	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Aviemore.
3963	Reduce flood risk	Reduce the risk of flooding from the River Spey and Aviemore Burn in Aviemore.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood study (Ref: 39601)	
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.
Description	The Highland Council to develop a flood model of the Aviemore Burn to determine the extent of flood risk to Aviemore from the burn. Subject to the outcome of the modelling an appraisal of options to mitigate flooding will be carried out, determining a preferred option.

Flood warning maintenance (Ref: 39602)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should maintain the River Spey flood warning scheme.

## 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 warning maintenance (Ref: 39603)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should investigate improvements to the River Spey flood warning scheme.

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.

## Coordination with the river basin management plan

This area has been identified as having potential for restoration in Scotland's river basin management plan. Actions should be coordinated to deliver any potential joint objectives for restoration and flood risk management. This should be considered in the earliest stages of any projects.

## 02/05/11 (Kingussie)

This is designated as a potentially vulnerable area due to river flood risk to Kingussie. The main source of flooding is the Gynack Burn. Recent flooding was caused by rivers.

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

### List of target areas

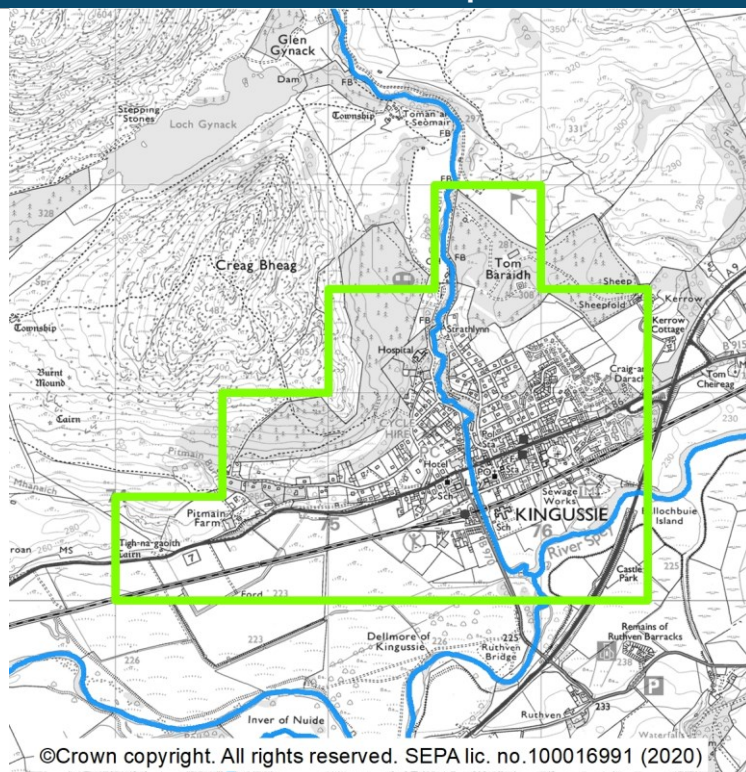
Kingussie (target area 395)

## Kingussie (target area 395)

### Summary

Kingussie is situated in the Cairngorms National Park on the banks of the River Spey. It is within the Highland Council Area. The main source of flooding in Kingussie is river flooding. There are approximately 270 people and 180 homes and businesses currently at risk from flooding. This is likely to increase to 330 people and 220 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 understanding of river flooding has improved by the recent flood modelling of the River Gynack to determine the extent of flood risk to Kingussie. Whilst the River Gynack is the main source of flooding in Kingussie, the understanding of flooding from the River Spey has also improved through the development and operation of the River Spey flood warning scheme. The understanding of surface water flood risk is improved by a sewer flood risk assessment. There are records of regular flooding from the River Gynack in Kingussie including a notable flood in August 2014 due to ex-Hurricane Bertha.

## 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
3951	Avoid flood risk	Avoid inappropriate development that increases flood risk in Kingussie.
3952	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Kingussie.
3953	Reduce flood risk	Reduce the risk of flooding from the Gynack Burn in Kingussie.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood study (Ref: 39501)	
<b>Action</b>	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.
<b>Description</b>	The Highland Council have developed a flood model of the River Gynack to determine the extent of flood risk to Kingussie. Based on the outcome of the modelling an appraisal of options to mitigate flooding will be carried out, determining a preferred option.

Flood warning maintenance (Ref: 39502)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the River Spey flood warning scheme.

## 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 warning maintenance (Ref: 39503)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should investigate improvements to the River Spey flood warning scheme.

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.

## 02/05/12 (Newtonmore)

This is designated as a potentially vulnerable area as Newtonmore is at risk of flooding from surface water. Past flooding in the area was caused by surface water.

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

### List of target areas

Newtonmore (target area 443)

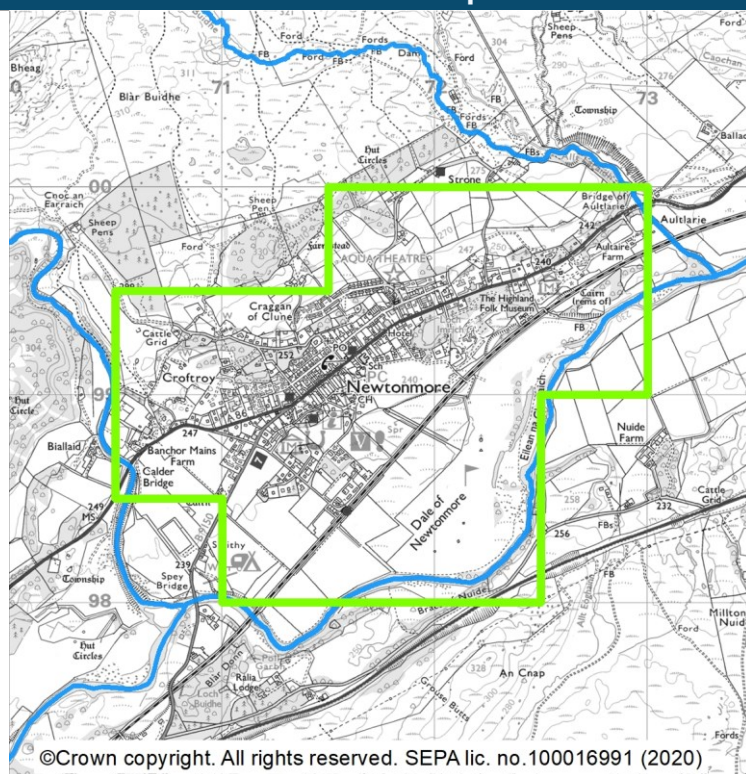


## Newtonmore (target area 443)

### Summary

Newtonmore is in the Cairngorms National Park within the Highland Council area. The River Spey is located to the south and south-west of the village. The main source of flooding in Newtonmore is surface water flooding. There are approximately 130 people and 100 homes and businesses currently at risk from flooding. This is likely to increase to 140 people and 110 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 understanding of surface water flood risk is improving due to the ongoing development of a Highland wide surface water management plan which includes Newtonmore as a priority area. A sewer flood risk assessment has also been completed. There are periodic records of flooding in Newtonmore.

## 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
4431	Avoid flood risk	Avoid inappropriate development that increases flood risk in Newtonmore.
4432	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Newtonmore.
4433	Reduce flood risk	Reduce the risk of surface water flooding in Newtonmore.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Sewer flood risk assessment (Ref: 44301)	
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
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Newtonmore 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.
Surface water management plan (Ref: 44302)	
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.
Description	The Highland Council to continue to develop and implement the Highland wide surface water management plan which includes Newtonmore as a priority area. The surface water management plan identifies areas most at risk from surface water flooding in Newtonmore and identifies options that could alleviate this risk.
Flood warning maintenance (Ref: 44303)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should maintain the River Spey flood warning scheme.

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 warning maintenance (Ref: 44304)	
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Description	SEPA should investigate improvements to the River Spey flood warning scheme.

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.

## 02/05/13 (Dalwhinnie)

This is designated as a potentially vulnerable area as Dalwhinnie is at risk of river flooding. Recent flooding was caused by both river and surface water.

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

### List of target areas

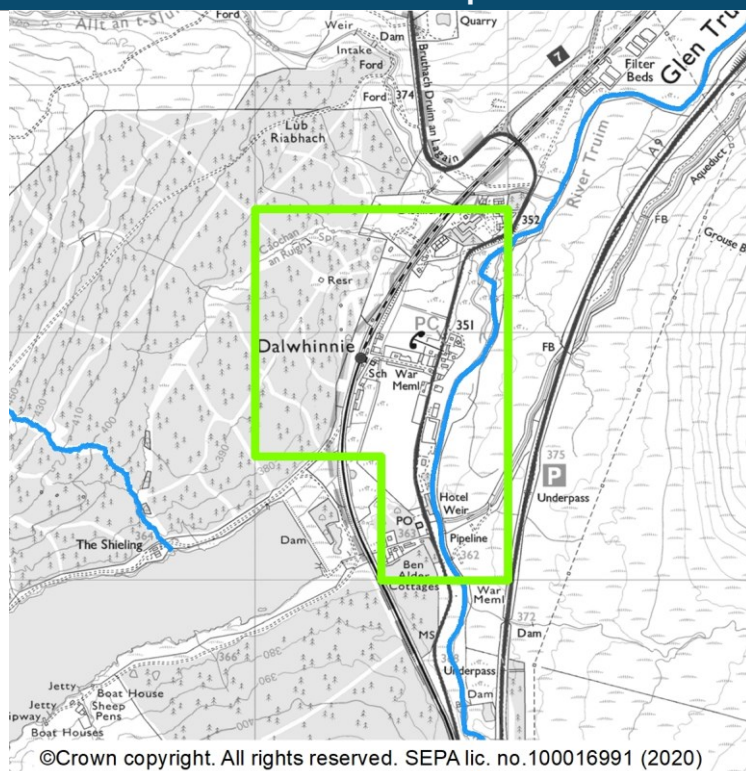
Dalwhinnie (target area 394)

## Dalwhinnie (target area 394)

### Summary

Dalwhinnie is on the edge of the Cairngorms National Park in the Highland Council area. The main source of flooding in Dalwhinnie is river flooding. There are approximately 30 people and 30 homes and businesses currently at risk from flooding, which is a significant proportion of the community. This is not expected to change significantly 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 improving as a result of the ongoing mapping and modelling of the River Truim and its tributaries. There are limited records of flooding in the Dalwhinnie 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
3941	Avoid flood risk	Avoid inappropriate development that increases flood risk in Dalwhinnie.
3942	Improve data and understanding	Improve data and understanding of the risk of river flooding in Dalwhinnie.
3943	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Dalwhinnie.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood risk management review (Ref: 39401)	
Action	During each 6 year planning cycle, we update our understanding of flooding to include all new data and information that has become available. This includes information on any flooding that has happened and the latest predictions on the impacts of climate change. The updated understanding is used to set any appropriate objectives and actions for areas at risk of flooding.
Description	No local actions specific to this target area have been identified yet. There are national actions planned that will cover this area, including an update to SEPA's surface water flood maps and an update to the national flood risk assessment. These, along with other actions that are carried out across the whole local plan district covering this area, will help to manage flood risk in the long term. The need for actions for this area will be reviewed again in 2026.

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.



## 02/05/14 (Kinloss)

Kinloss is designated as a potentially vulnerable area due to the flood risk from rivers and surface water. A small number of properties are at risk of coastal flooding. Due to climate change induced sea-level rise, this flood risk is expected to increase. Recent flooding was a result of surface water.

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

### List of target areas

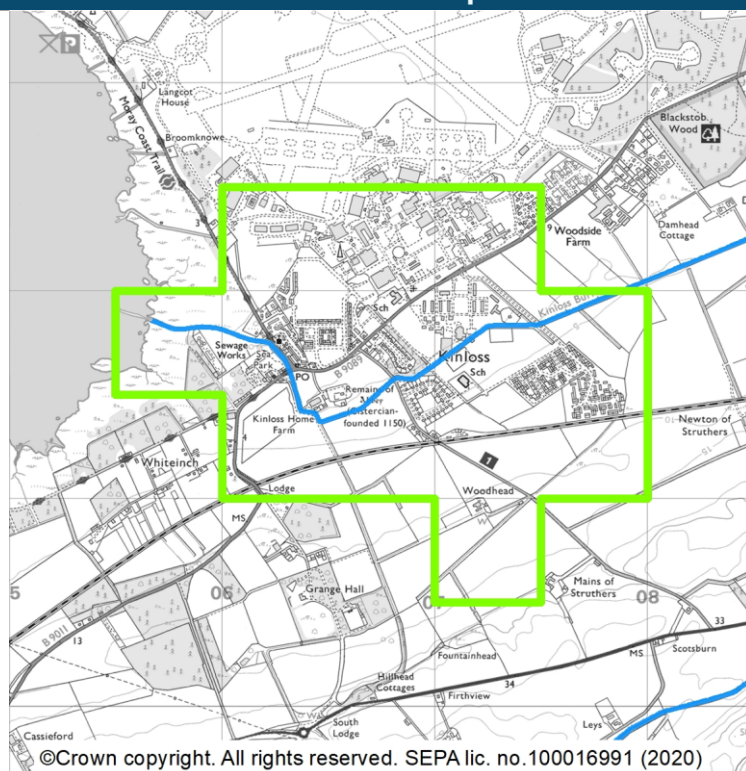
Kinloss (target area 420)

## Kinloss (target area 420)

### Summary

Kinloss is a village located near the shore of Findhorn Bay in the Moray Council area. The main source of flooding in Kinloss is from river flooding, however there is also a risk of surface water and coastal flooding. There are approximately 320 people and 220 homes and businesses currently at risk from flooding. This is likely to increase to 390 people and 270 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, and this national assessment has highlighted the risk of flooding to a significant proportion of the community in Kinloss. This risk is also expected to increase with climate change. Kinloss has therefore been identified as a new target area for the 2021 flood risk management plans. The national assessment is improved for coastal flooding by the development and operation of the Moray Firth flood warning scheme. There are limited records of flooding in Kinloss.

## 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
4201	Avoid flood risk	Avoid inappropriate development that increases flood risk in Kinloss.
4202	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Kinloss.
4203	Improve data and understanding	Improve understanding of the risk of surface water, river and coastal flooding in Kinloss.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Sewer flood risk assessment (Ref: 42001)	
<b>Action</b>	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
<b>Description</b>	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Forres 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.

Flood warning maintenance (Ref: 42002)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the Moray Firth coastal flood warning scheme.

## 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.

Data collection (Ref: 42003)	
<b>Action</b>	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.
<b>Description</b>	Data collection and monitoring should be carried out to improve the confidence in flood sources, mechanisms and risk. A review may be required to assess the need for rain and/or river gauges. Post flood event surveys may be required to collect data on flooding mechanisms, risk and damage caused.

Flood study (Ref: 42004)	
<b>Action</b>	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.
<b>Description</b>	A flood study should be carried out to improve understanding of flood risk in Kinloss. The impacts of climate change on flood risk should be assessed.

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.

## 02/05/15 (Nethy Bridge)

This is designated as a potentially vulnerable area due to a risk of river flooding to Nethy Bridge. There are no records of recent flooding in Nethy Bridge.

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

### List of target areas

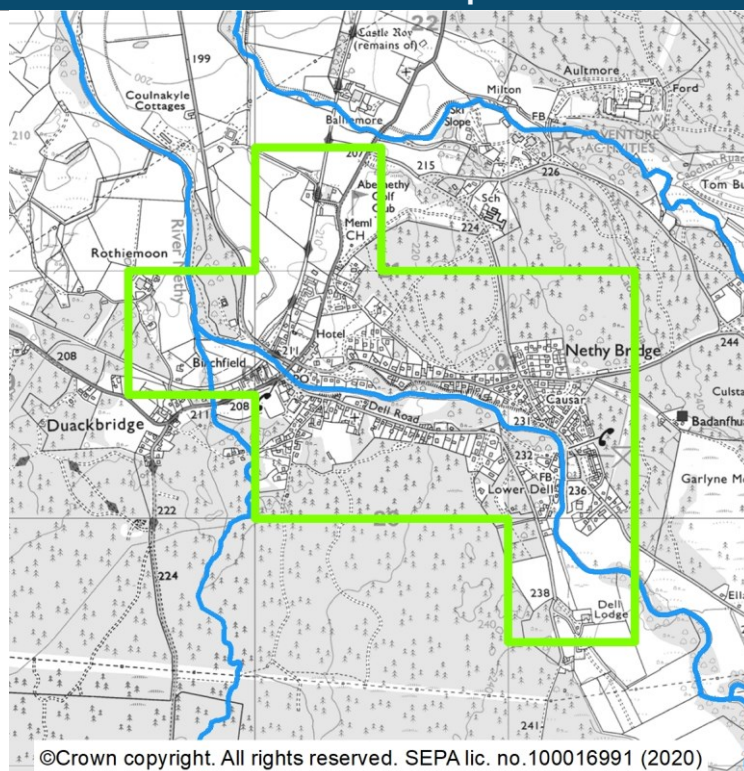
Nethy Bridge (target area 434)

## Nethy Bridge (target area 434)

### Summary

Nethy Bridge is a village on the banks of the River Nethy in the Highland Council area. Nethy Bridge is at risk of river and surface water flooding. There are approximately 180 people and 120 homes and businesses at risk from flooding. This is likely to increase to 200 people and 130 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, and this national assessment has highlighted the risk of flooding (principally from the River Nethy) in this area. Nethy Bridge has therefore been identified as a new target area for the 2021 flood risk management plans. There are limited recent records of flooding in the Nethy Bridge 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
4341	Avoid flood risk	Avoid inappropriate development that increases flood risk in Nethy Bridge.
4342	Improve data and understanding	Improve data and understanding of the risk of flooding from the River Nethy in Nethy Bridge.
4343	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Nethy Bridge.

## What actions are proposed for this area?

As outlined in Section 1 of this plan, at the date of publication the actions below represent the best understanding of what is needed to work towards the objectives for the area. They have been developed with the other responsible authorities and take account of progress achieved to date, the understanding of flood risk and the objectives set for the area. The local flood risk management plan published in 2022 provides more information on the actions, their timing and how they will be funded and coordinated.

## Actions proposed to start between 2022 and 2028

Flood study (Ref: 43401)	
<b>Action</b>	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.
<b>Description</b>	The Highland Council to develop a flood model of the River Nethy and Duack Burn to determine the extent of flood risk to Nethy Bridge from the river and the burn. Subject to the outcome of the modelling an appraisal of options to mitigate flooding will be carried out, determining a preferred option.

Community flood alert (Ref: 43402)	
<b>Action</b>	A community river level alerting system is to be installed to provide information on the potential for localised flooding.
<b>Description</b>	A river level alerting system is being installed with the help of the Scottish Flood Forum.

Flood warning maintenance (Ref: 43403)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should maintain the River Spey flood warning scheme.

## 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 warning maintenance (Ref: 43404)	
<b>Action</b>	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
<b>Description</b>	SEPA should investigate improvements to the River Spey flood warning scheme.

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.

## Annex 1: Costs of actions

Action	Indicative capital cost (£)	Notes
Adaptation plan	30,000	Costs can vary greatly depending on the scale and complexity of flooding
Data collection	20,000	
Flood scheme or works design	300,000	Costs can vary greatly depending on the scale and complexity of flooding, along with the ground conditions
Flood study	50,000	Costs can vary greatly depending on the scale and complexity of flooding
Flood study (existing flood defences)	80,000	
Flood study (options appraisal)	40,000	
Shoreline Management Plan (Coastal Adaptive Plan)	100,000	
Surface water management plan	30,000	
Flood scheme or works implementation	N/A	Schemes are very individual and it is not possible to provide an indicative cost.
The costs involved in the following actions are predominately from staff resource:		
Community engagement	N/A	Resources required are very specific for the individual action. It is currently not possible to estimate a resource cost.
Community flood alert	N/A	
Community resilience group	N/A	
Emergency plan	N/A	
Flood defence maintenance	N/A	Cost of maintenance is specific to the defence and is impacted by among other things age and type of the defences. It is not possible to provide indicative costs.
Flood risk management review	N/A	Resources required are very specific for the individual action. It is currently not possible to estimate a resource cost.
Flood warning maintenance	N/A	
Flood warning scoping	N/A	
Land Use Planning	N/A	
Maintain flood protection scheme	N/A	
New flood warning area	N/A	
Property flood resilience scheme	N/A	
Sewer flood risk assessment	N/A	
Site protection plan	N/A	
Strategic mapping improvements	N/A	

## Annex 2: Flood risk management plans consultation summary

Asking for and listening to input from stakeholders and the public is a key part of flood risk management in Scotland. SEPA and the local authorities undertook a joint consultation, which ran in 2 phases between December 2020 and October 2021. Phase 1, opened in December 2020 and included a summary of flooding in each Local Plan District, a description of the potentially vulnerable areas and the identified local target areas. Phase 2 opened for responses on 30th July 2021 and closed on 31st October 2021. Phase 2 identified the objectives for each target area and the actions needed to achieve these objectives. It also included prioritisation of the actions by 6 year cycle. Local authorities provided more detail in the draft local flood risk management plans, which included an expanded description of the actions, and who would lead and coordinate delivery.

The consultation was open to everyone with an interest in flood risk management.

The communications campaign to publicise the consultation aimed to encourage anyone with an interest in flooding to have their say on how flood risk is managed across Scotland.

Communication activities included:

- A public notice in the Edinburgh Gazette and The Herald
- A national press release
- Social media posts on Facebook, Twitter, LinkedIn, Instagram
- A national targeted, paid social media campaign on Facebook, Twitter, and Instagram.

An animation and graphics were created to promote the consultation. These were shared with all responsible authorities in advance of the consultation and were regularly publicised via social media. The consultation was picked up by many local media outlets including local newspapers.

SEPA staff also supported several national events aimed at raising awareness of the consultation.

Demonstration of the consultation platform was provided to ensure that stakeholders were able to navigate the Citizen Space platform and answer the consultation questions.

Local authority flooding teams were provided with briefing packs with access to draft article templates and social media messages which they could use to promote the consultation within their own organisation and local area. Many local authorities used their network of community councils to promote the consultation.

In total SEPA received 677 responses. These included 654 online responses via the consultation platform Citizen Space and 23 e-mail responses received via SEPA's consultation mailbox. Compared to the first consultation on the flood risk management strategies in 2014, there has been a welcome three-fold increase in the number of responses. The majority of the responses (520) were from members of the public. This reflects increased public awareness of flooding and flood risk management, and the increasing risk due to climate change.

SEPA is grateful to individuals and organisations for considering the proposals and providing feedback. Responses varied from detailed comments on the actions proposed in individual target areas, to general comments on flooding and flood risk management. The sections below provide a brief outline of the responses received and changes made as a result.

Many of the aspects raised relate to the underlying requirements of the Flood Risk Management (Scotland) 2009 Act, to activities which are the responsibility of other organisations, or to the content of the local flood risk management plans. Working within safe data sharing practices, SEPA will ensure the feedback received is passed to other responsible authorities to consider and act on.

This summary is a factual statement of the responses provided. All responses received have been read and considered, resulting in a number of changes to the plans. Further detail on the analysis of responses will be published by SEPA in Spring 2022.

## **Identifying communities and infrastructure at risk**

In the consultation SEPA asked whether all the main communities and infrastructure at significant risk of flooding were identified. 45% of respondents agreed that the main communities and infrastructure were identified and 29% stated they were not sure. 21% of respondents felt that some communities were missing from the plans.

Some respondents who had recently flooded were concerned that their communities were not identified as target areas. Some respondents suggested additional areas for SEPA to consider where flooding has occurred in the past. Concerns were also expressed about the method used to identify the main communities at risk.

## **Proposed objectives**

34% of respondents supported the proposals for objectives to manage flood risk in target areas and 30% were not sure. 25% did not agree and 10% did not answer this question.

The main concerns of those who did not agree with the proposed objectives were that timescales were long-term and would not result in immediate action, objectives did not cover wider issues such as sewerage flooding, objectives were not detailed enough, and that objectives did not limit new development. There were concerns that there was no evidence being provided to show that the objectives were being met by the authorities, and that objectives were not leading to actions on the ground.

## **Proposed actions to manage flood risk**

43% of respondents were not sure whether the actions would work towards achieving the objectives. 25% of respondents did not agree with the proposed actions to manage flood risk. 20% agreed with the proposed actions and 12% did not answer this question.

Those who did not agree expressed concerns that flood studies were not resulting in actions on the ground, that actions were not detailed enough, some stressed the need for other actions such as drain clearance being done now and some emphasised the need for a catchment-based approach and natural flood management.

Others asked for more watercourse clearing and river management and more transparency from the local authority in publicising the maintenance plan for flood defences. Concerns were also expressed that new development is not being controlled and is contributing to increased surface water flooding and that there were no actions to address sewerage flooding. Concerns were also raised about funding for actions.

NatureScot provided feedback on specific target areas and the impacts on biodiversity and designated sites.

### **Timescales for implementing actions**

In terms of the proposed timescales, 36% of respondents did not agree and 32% were not sure of the identified timescales. 17% agreed and 15% did not respond to this question.

Those who disagreed were concerned that actions were taking too long and that more urgent action is needed in light of climate change. Respondents also commented that timescales were too vague and should be more detailed.

### **What can individuals, communities and organisations do to help manage flood risk?**

SEPA also asked whether individuals, communities or organisations were able to help with flood risk management in Scotland. There was a range of responses to this question, with 39% of respondents agreeing that there is something they could do to help manage flood risk and 26% of respondents not sure that there are things they could do.

Those who were not sure asked for more guidance from the authorities. However, many felt that there was something that communities or individuals can do.

Suggestions included less paving of gardens to help attenuate rainwater, authorities developing information to help the public make more informed decisions, community organised clearance of watercourses where it is safe to do so, reporting blockages and flooding to the authorities, planting trees and greening of cities.



## Acting on consultation feedback

Several changes were made to the final flood risk management plans as a result of the input received during the consultation. A summary of those changes is provided in the table below, and full details will be provided in the consultation digest to be published by SEPA in Spring 2022.

Summary of changes made to the plans following the consultation	
1.	Further actions were added to manage flood risk in several target areas.
2.	Additional Local Plan District actions were added.
3.	Some actions were removed from the flood risk management plans at the request of local authorities responsible for their delivery due to completion in the time between consultation and publication.
4.	Further information was included on how climate change was assessed in the preparation of the plans.
5.	Further information was included on how potentially vulnerable areas were identified, and when they will be reviewed again.
6.	Information was included on the progress made in implementing actions and working towards objectives in the 2015 strategies.
7.	A target area boundary was amended based on new information provided.
8.	A description of the importance of community actions, recognising the work that communities do to manage flooding was included, along with further information on where support is available to help people reduce their own flood risk.
9.	A description of the catchment-based approach SEPA has taken, and the role it plays in delivering flood risk management actions was provided.
10.	The link between flood risk management plans and land use planning was clarified.
11.	Habitats Regulations Appraisal statements were added to each relevant action.
12.	Some other changes were made to the way information is presented to try to make it clearer e.g., on the timing of actions being carried out.
13.	Further information was provided on the uncertainty associated with funding of flood risk management actions.

## Annex 3: Acknowledgements

SEPA acknowledges the cooperation and input provided in preparing these plans, including the following:

**Ordnance Survey** Maps are based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright. Any unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. SEPA Licence number 100016991 (2020).

**The Centre for Ecology and Hydrology** Some of the plan development is based upon digital spatial data licensed from the Centre for Ecology and Hydrology © NERC (CEH) and third party licensors.

**Local authorities** SEPA acknowledges the provision of flood models and other supporting data and information from local authorities in Scotland and their collaboration in the production of flood risk management information.

**Scottish Water** SEPA acknowledges the inclusion of surface water flooding data generated by Scottish Water in preparation of flood risk information.

**The Flood Hazard Research Centre** Multi-coloured Manual and Multi-coloured Handbook 2016.

All contributors to the **2018 NFRA**, more information on which can be found at <https://www.sepa.org.uk/data-visualisation/nfra2018/>