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# 1 Flood Risk Management in Findhorn, Nairn and Speyside Local Plan District

### 1.1 What is a flood risk management plan?

Flood Risk Management Plans are required under the Flood Risk Management (Scotland) Act 2009 and are updated every 6 years.

Flood Risk Management Plans are Scotland's route map for reducing the effects of flooding on our communities. This is key to 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.

The Local Flood Risk Management Plan (the Plan) for the Findhorn, Nairn and Speyside Local Plan District has been designed to ensure effort to reduce flood risk in this catchment area is coordinated. This is achieved by working in partnership with all organisations responsible for flood risk management and the plan focuses 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 the plan.

The Plan sets out how and when actions to reduce the impact of flooding in the Findhorn, Nairn and Speyside Local Plan District (LPD) identified in the National Flood Risk Management Plan will be delivered. The Plan identifies where the risk of flooding and benefit of investment is greatest and says how and when actions will be delivered. Flood Risk Management Plans are delivered over six-year cycles. This plan is for Cycle 2 and will be delivered between 2022 and 2028.

The content of the Plan has been produced by Moray Council as the Lead Local Authority for this LPD, in agreement with the designated Responsible Authorities, that are listed below:

Local Flood risk management plans: Findhorn, Nairn and Speyside Local Plan District (LPD 5)

- The Highland Council;
- · Scottish Water;
- SEPA;
- · Forestry Commission Scotland; and
- Cairngorms National Park Authority

This plan replaces the flood risk management plan for Cycle 1, which was published in 2016.



High Springtide at Lossiemouth 2019

# 1.2 Managing flooding in Findhorn, Nairn and Speyside LPD

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 Flood Risk Management 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: 2016-2022

The 2016 local flood risk management plan outlined the long term objectives to tackle flooding in the areas at highest risk within Findhorn, Nairn and Speyside.

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

In 2019 Moray Council published the interim report for the Findhorn, Nairn and Speyside LPD. This report gave the status of each action at that time and reported them 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. The final report was published December 2022. These reports are published here.

## 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 the Plan and will be central to delivery of the objectives and actions set out.

Strong relationships between these organisations were developed through the first cycle of The Plan. Working with these organisations has allowed us to gather local knowledge, expertise and 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 the 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 Moray Council website.

#### 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 SEPA's flood maps to check if your area is affected by flooding <a href="https://map.sepa.org.uk/floodmaps">https://map.sepa.org.uk/floodmaps</a>
- Sign up to Floodline to receive messages when flooding is forecast in your area <a href="https://www.floodlinescotland.org.uk/">https://www.floodlinescotland.org.uk/</a>
- Know who to contact if flooding happens
   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 SEPA's Floodline website and on the Scottish Flood Forum website

#### a) 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.

#### b) SEPA

SEPA is Scotland's national flood forecasting, flood warning and strategic flood risk management authority. SEPA works in partnership with the Met Office to forecast flooding and operate Floodline to warn the public and emergency responders when flooding is likely. SEPA produces 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 provides flood risk advice on land use planning when requested and raises awareness of flooding at a national level through education initiatives, community engagement and campaigns.

#### c) 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.

#### d) 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.

#### e) 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 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 <u>Scottish Flood Forecasting Service</u>, 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.

#### 1.3.3 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. Public consultations have been held, jointly with SEPA, during the development of the Plan.

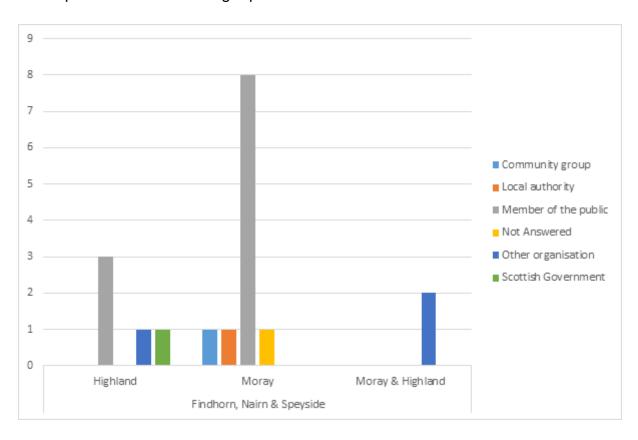
The most recent consultation ran from July 2021 to October 2021 and covered information on the objectives and actions planned for each target area within the Findhorn, Nairn and Speyside LPD. The consultation was advertised widely by both Moray Council and SEPA. A summary of the consultation is provided in section 1.3.4.

Moray Council submitted a Strategic Environmental Assessment (SEA) Screening Report to the SEA Gateway. The SEA Gateway advised that a Strategic Environmental Assessment was not required for the Plan.

A Habitats Regulations Appraisal (HRA) has been undertaken for the National Flood Risk Management Plan that has informed the Plan. Where the HRA identified mitigation measures to protect the nature interests, these have been incorporated into the Plan, this only includes actions identified in the National Flood Risk Management Plan. Studies included in the National Flood Risk Management Plan and the Plan may recommend schemes or works that will be the subject of future plans and full assessment would be undertaken as part of the development process. Where studies identify actions likely to have significant effects on qualifying interests of nature sites an appropriate assessment will be required. Where it cannot be shown that there will be no adverse effect on site integrity, proposals will be refused.

#### 1.3.4 Consultation Report

A joint consultation was undertaken for both the National and Local Flood Risk Management Plans between 31 July and 31 October 2021. A total of 18 replies were received for the Findhorn, Nairn and Speyside LPD area. The responses received were split across the following representatives:-



There were 3 key areas highlighted in the majority of the responses received, details of which are provided below.

- Land use planning and the possibility of a large housing development taking
  place in Nairn and the Impacts that this development will have on flood risk
  due to surface water flooding. As part of the Plan Highland Council will
  continue to ensure that planning applications will be dealt with in line
  with the current guidelines and polices
- Surface water flooding in Forres and the plans which Moray Council intend to undertaken with particular reference to Bank Lane. Moray Council during this cycle will complete a Surface Water Management Plan. If actions from the plan propose a solution, funding for this solution will be looked for in Cycle 3 of the flood risk management planning process.

Surface water flooding within Elgin. Moray Council has developed a
 Surface Water Management Plan for Elgin. Actions from this plan have been forward for national prioritisation by Scottish Government and subject to resources and funding a surface water scheme will be progressed within Elgin.



Surface Water Flooding in Elgin

### 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 pivotal to achieving sustainable flood risk management. Flood risk management can have significant implications for the location of development and similarly the location of development can have an impact on flood risk. Actions that deliver national land use planning policies are summarised in Annex 3.

The Moray Council develops and adopts a new Local Development Plan every five years. It sets out the Council's strategy for delivering appropriate development in Moray, considering a number of potential constraints, including flooding. The current plan was adopted in July 2020.

Periodically The Highland Council will review and update its Local Development Plans. These plans set out the strategy for delivering appropriate development within each area and take into account a number of constraints, including flooding. The current Highland-wide Local Development Plan was adopted in 2012, a review of this plan has begun and consultation on the Main Issues Report (carried out by The Highland Council) concluded in January 2016. The new plan was published in the summer of 2016 and adopted in winter 2017. The new Highland-wide plan has taken into account of the flood risk and the actions proposed in this Plan.

The Inner Moray Firth Local Development Plan is the part of the Highland wide development plan relevant to this Plan.

#### 1.4.3 Emergency planning and response

Emergency planning and response is undertaken by Category 1 and 2 responders including Police Scotland, the Scottish Fire and Rescue Service, the Scottish Ambulance Service, both local authorities, the NHS, the Met Office and SEPA. Emergency plans are prepared under the Civil Contingencies Act 2004. The Moray Council produces its Emergency plans, while the Highland Council is a member of the Highlands and Islands Local Resilience Partnership. These partnerships coordinate the emergency response to flood events, such as road closures, evacuations and temporary accommodation.

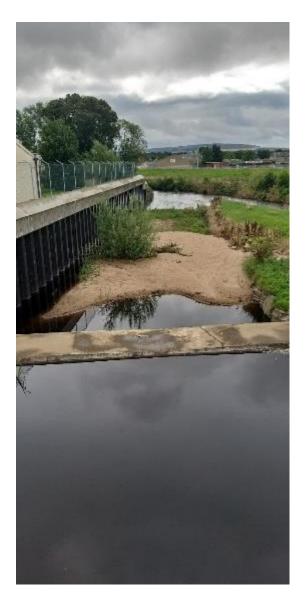
#### 1.4.4 Scottish Water investment plans

There is a close relationship between Local 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.

#### 1.4.5 Duty to assess bodies of water and schedule clearance and repair works

The duty to assess bodies of water and schedule clearance and repair works lies with Moray Council and The Highland Council.

Moray Council has a risk-based approach to assessing bodies of water that may give rise to flooding. Where potential flood risk has been identified the relevant water body has been included in the Council's routine inspection schedule. The frequency of inspection is dependent on the assessed risk, any works identified during these inspections are included in the Council's schedule of clearance and repair. The Moray Council's schedule of clearance and repair works is published online at:





Example of Clearance and Repair works

The Highland Council has implemented a plan-led, risk-based approach to assessing bodies of water that may give rise to flooding and has documented over 500 watercourses and 2,000 related structures throughout the Highland Council area. A full-time watercourse inspector is employed to assess routinely the risk of flooding from each structure (e.g. a culvert inlet or screen). Should any routine clearance work be required that cannot be carried out at the time of inspection, the work required substantially to reduce the risk of flooding is entered in a schedule of clearance and repair works and made available for public inspection. The Highland Council's schedule of clearance and repair works is published online at:

http://www.highland.gov.uk/info/1210/environment/81/flooding/5

# 1.5 Next steps and monitoring progress

Moray Council and the other responsible authorities are committed to continue 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.

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 Local flood risk management actions

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 Plan 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.

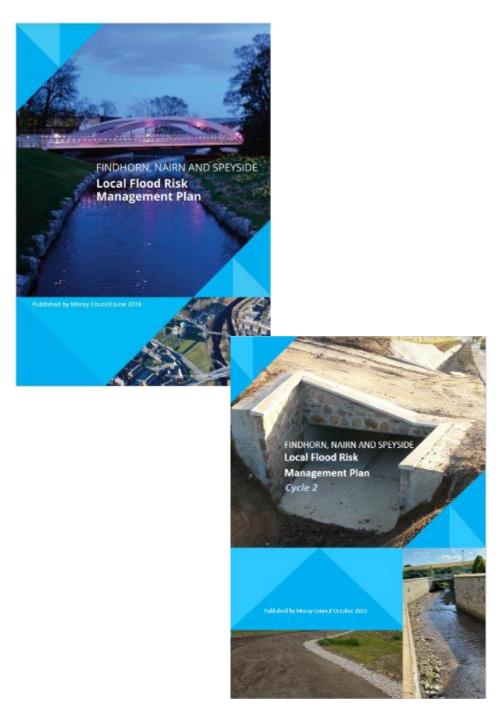
This plan remains the best understanding of the objectives and actions required over the long term to manage flood risk in the identified high risk areas within this LPD. The delivery of the Plan, particularly the ambitions on how quickly actions can be delivered, may have to be adapted to reflect wider developments in public funding,

<sup>&</sup>lt;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.

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.



Flood Risk Management Plans For Cycle 1 & 2

# 2 Flood Risk Management in Findhorn, Nairn and Speyside Local Plan District

# 2.1 Local Flood Risk Management Plans 2022 - 2028

The Findhorn, Nairn and Speyside Local Plan District covers an area of around 4,800km² 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.

The Plan is led by Moray Council, Other responsible authorities include The Highland Council, Cairngorms National Park Authority, SEPA, Forestry and Land Scotland and Scotlish Water.

They are supported by Scottish Government agencies including Transport Scotland.

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Local Flood risk management plans: Findhorn, Nairn and Speyside Local Plan District (LPD 5)

Within this Local Plan District, actions are regularly carried out by 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

Responsible authorities carry out actions in all areas of the LPD 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	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.
	Local authorities will undertake additional awareness raising
	activities when developing any specific project proposals and will
	engage with community resilience groups and local communities.
	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.

	Data to support climate resilience
Action	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.
	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.  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.

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

	Flood forecasting
Action	The Scottish Flood Forecasting Service is a partnership between
	SEPA and the Met Office. The service continues to produce a daily,
	national flood guidance statement, issued to emergency
	responders, local authorities, and other organisations with flood risk
	management duties. In 2022 a new 3-day daily Scottish Flood
	Forecast was launched for the public.
	As the flood warning authority for Scotland SEPA continues to
	provide its flood warning service issuing flood alerts and warnings
	when required, giving people a better chance of reducing the impact
	of flooding on their home or business.

#### Flood warning development framework

#### Action

SEPA published a new flood warning development framework in 2022, which details the ambition and strategic actions to maintain and improve the flood warning service across Scotland.

SEPA will further develop phase 1 of the Scottish Flood Forecast based on feedback gathered during public beta release before fully launching the service to the public formally in early 2023. Phase 1 is the national 3-day flood forecast and the starting point of our journey in providing the public with earlier and improved flood information.

SEPA will continue to follow the service design approach for phase 2 of the Scottish Flood Forecast, which will provide the public with more localised flood forecast information. User research will determine what information will be displayed on the regional flood forecast webpages. It is anticipated that the final service will bring together all live information such as flood warnings, river levels and rainfall data into a central hub that is easily accessible for the public.

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 forecasting with improved lead time.

#### Future flood risk management planning

#### Action

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. The plans will look to develop long term plans for more flood resilient communities prepared for the impacts of climate change.

The priority areas which will be the focus points of the next flood risk management plans will be identified in 2024 with the designation of PVAs. A 3-month public consultation will be held to inform the PVA designation.

We will plan for a better future by publishing our flooding services strategy in 2023 with a clear and measurable delivery plan. We will put greener, fairer communities at the heart of our ambitions.

SEPA has set its own target to be a regenerative organisation by 2030 and the next set of plans will further this ambition.

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.

# **Guidance development** Action The Scottish Government and SEPA have developed and updated guidance to inform flood risk management projects. This guidance has 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. Technical guidance to support flood risk management partners will be reviewed and updated by SEPA where required. Scottish Forestry, in collaboration with its UK counterparts, will produce guidance on designing and managing forests to reduce flood risk. 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.

# Action An understanding of flooding is essential to develop a plan led risk-

Hazard mapping updates

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:

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

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. SEPA will also review how modelling and mapping updates are undertaken to develop a more effective method of regional and national updates for the hazard maps.

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

	Maintenance
Action	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.
	Scottish Water will continue to undertake risk-based inspection,
	maintenance and repair on the public sewer network.

Asset owners and riparian landowners are responsible for the maintenance and management of their own assets including those which help to reduce flood risk.

	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.

	National flood risk assessment
Action	SEPA will use the most suitable data to review and update the
	national flood risk assessment (NFRA) undertaken in 2018. This
	update will be used to identify future potentially vulnerable areas
	and focus flood risk management planning.

	National surface water mapping
Action	The national flood risk assessment 2018 identified that surface
	water flooding has the potential to impact more properties in
	Scotland than any other source of flooding. Over the next 6 year
	cycle SEPA will look to vastly improve its national understanding of
	surface flood risk by undertaking a wholescale update of the

national surface water maps to reflect developments in data and understanding, including the impact of climate change.

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

	Scottish Flood Defence Asset Database			
Action	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.			

	Self help
Action	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:
	https://www.floodre.co.uk/

Local Flood risk management plans: Findhorn, Nairn and Speyside Local Plan District (LPD 5)

https://www.biba.org.uk/current-issues/flood-insurance/

https://floodlinescotland.org.uk/

https://scottishfloodforum.org/

Responsible authorities will continue to develop the understanding of flood risk to communities and promote measures to help individuals and businesses to reduce their risk.

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.

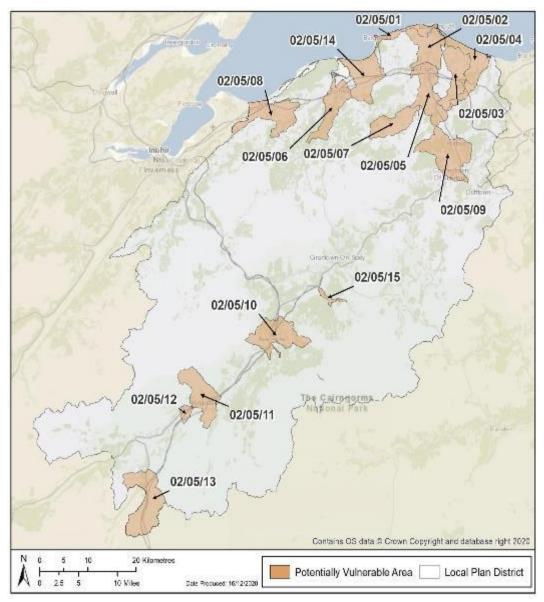


Figure 1. Potentially vulnerable areas in Findhorn, Nairn and Speyside Local Plan District

# 2.4 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 area	Page number
02/05/01	Burghead to Lossiemouth	Moray	32
02/05/02	<u>Spynie</u>	Moray	39
02/05/03	<u>Lhanbryde</u>	Moray	45
02/05/04	Kingston and Garmouth	Moray	49
02/05/05	Elgin	Moray	55
02/05/06	<u>Forres</u>	Moray	61
02/05/07	<u>Dallas</u>	Moray	66
02/05/08	<u>Nairn</u>	Highland	70
02/05/09	Rothes and Aberlour	Moray	78
02/05/10	Aviemore	Highland	88
02/05/11	Kingussie	Highland	92
02/05/12	Newtonmore	Highland	96
02/05/13	Dalwhinnie	Highland	101
02/05/14	Kinloss	Moray	104
02/05/15	Nethy Bridge	Highland	109

#### **2.4.1 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 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

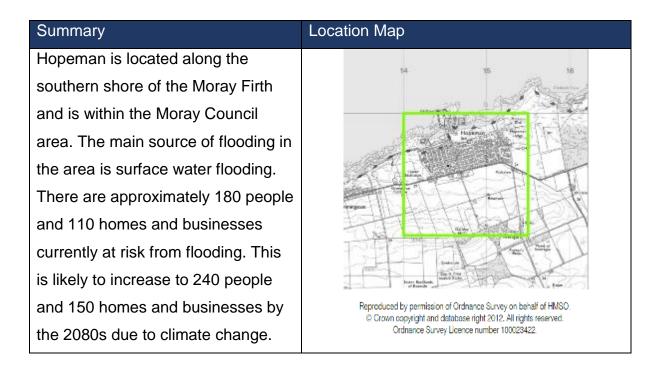
Hopeman (target area 389) Lossiemouth (target area 391)



Coastal Flooding at Lossiemouth Promenade

#### Local Flood Risk Management plan datasheet

#### 2.4.1.1 Hopeman 389



#### 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.

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

Action ID	Hopeman		38901
Action Type	Flood defence maintenance		
Action Delivery Lead	Moray Council	Indicative Delivery	2026-28
Description	Continue to maintain the flood protection works at Hopeman.  The scheme is to be maintained by the current landowner.		
Funding	Not Applicable		
Coordination	Moray Council will continue to liaise with the Land owner to ensure the works are maintenance in accordance with the maintenance schedule		

Action ID	Hopeman		38902	
Action Type	Sewer flood risk assessment			
Action Delivery	Moray Council	Indicative Delivery	2026-28	
Lead				
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.			
Funding	Funding for this action is secure within Scottish Water's business plan.			
Coordination	The action delivery lead is Scottish Water in coordination with			
	the local authority and SEPA.			

Action ID	Hopeman		38903
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Moray Firth coastal flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

#### Local Flood Risk Management plan datasheet

#### 2.4.1.2 Lossiemouth 391

# Summary **Location Map** 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 Reproduced by permission of Ordnance Survey on behalf of HMSO. Crown copyright and database right 2012. All rights reserved. climate change. Ordnance Survey Licence number 100023422.

#### 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.

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

Action ID	Lossiemouth		39101
Action Type	Sewer flood risk assessment		
Action Delivery	Scottish Water	Indicative Delivery	2025-2027
Lead			
Description	Scottish Water will u	undertake a modelling	assessment in the
	Lossiemouth sewer	catchment to improve	e knowledge and
	understanding of flood risk in this area as required under		
	Section 16 of the Flood Risk Management (Scotland) Act		
	2009		
Funding	Funding for this action is secured within Scottish Water's		
	business plan		
Coordination	Outputs of this mod	elling assessment wil	l be shared with
	local authorities and	I SEPA	

Action ID	Lossiemouth		39102
Action Type	Strategic mapping in	mprovements	
Action Delivery	SEPA	Indicative Delivery	2023-2024
Lead			
Description	SEPA has undertak	en improved coastal	modelling in this
	target area including	g taking account of the	e impact of waves
	on coastal flooding. We will complete and publish the		
	outcomes of this modelling work to inform decision making		
	with respect to flood	ling at the coast.	
Funding	SEPA's role in this action is funded by Scottish Government		
	through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authority on the potential to		
	coordinate the flood	l map update with any	other actions being
	carried out to under	stand or reduce coas	tal flooding.

Action ID	Lossiemouth		39103
Action Type	Flood warning main	tenance	
Action Delivery	SEPA	Indicative Delivery	Ongoing
Lead			
Description	SEPA will maintain	the Moray Firth coast	al flood warning
	scheme.		
Funding	SEPA's role in this action is funded by Scottish Government		
	through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to		
	use information from any flood studies around the Moray Firth		
	coast to inform ongoing flood warning. SEPA will continue to		
	raise awareness of flood warning, and engage with		
	communities about	the service when requ	uired.

# 2.4.2 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)



Mouth of the River Lossie

# 2.4.2.1 Seatown, Lossiemouth 9991

# 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. Recuculd by permission of Ordneroe Survey on behaff of HMSO.

## 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.

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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.

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

Action ID	Seatown, Lossiemo	outh	999101
Action Type	Flood scheme or wo	orks design	
Action Delivery Lead	Moray Council	Indicative Delivery	2026-2028
Description	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.  Moray Council 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 by Scottish Government.		sign. This is to e need for an
			. The delivery of this
	the scheme or work ensure the action w integrity of the Mora	s, the responsible au ill not have an advers ay Firth Special Area Area, and the Lower F	e effect on the of Conservation and
Funding	flood capital monies	ct to funding via the S s. This funding has no uction of this report.	
Coordination		lead is Moray Counci Authorities including c	

Action ID	Seatown, Lossiemo	999102		
Action Type	Flood scheme or wo	Flood scheme or works implementation		
Action Delivery Lead	Moray Council	Indicative Delivery	2026-2028	
Description	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.  Moray Council 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.			
Funding	This works is subject to funding via the Scottish Government flood capital monies. This funding has not been allocated at the time of the production of this report.			
Coordination	•	lead is Moray Counci Authorities including c		

Action ID	Seatown, Lossiemouth		999103
Action Type	Community engage	ment	
Action Delivery Lead	Moray Council	Indicative Delivery	2025-2028
Description	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of the flood protection scheme, and building community resilience		
Funding	Moray Council Revenue		
Coordination	•	Moray will coordinate with Responsible Authorities to ensure that communities are aware of the risk and resilient to the risk	

Action ID	Seatown, Lossiemouth		999104
Action Type	Sewer flood risk ass	sessment	
Action Delivery Lead	Scottish Water	Indicative Delivery	2027-2028
Description	Scottish Water will undertake a modelling assessment in the Lossiemouth sewer catchment to improve knowledge and understanding of flood risk in this area as required under Section 16 of the Flood Risk Management (Scotland) Act 2009		
Funding	Funding for this action is secured within Scottish Water's business plan		
Coordination	Outputs of this mod local authorities and	elling assessment wil I SEPA	I be shared with

Action ID	Seatown, Lossiemouth		999105
Action Type	Flood warning main	tenance	
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Moray Firth coastal flood warning scheme.		pastal flood warning
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies around the Moray Firth coast to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required		

Action ID	Seatown, Lossiemouth		999106
Action Type	Strategic mapping in	mprovements	
Action Delivery Lead	SEPA	Indicative Delivery	2023 - 2024
Description	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.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	coordinate the flood	the local authority or I map update with any stand or reduce coas	other actions being



Wave Overtopping in Lossiemouth

# 2.4.3 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 one 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)



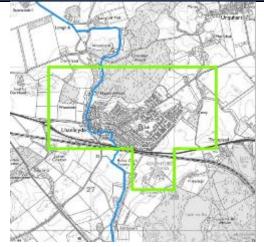
Lhanbryde Flood Alleviation Scheme

# 2.4.3.1 Lhanbryde 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**



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# 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.

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

Action ID	Lhanbryde		39001	
Action Type	Flood defence maintenance			
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing	
Description	The Lhanbryde Flood Alleviation Scheme will be maintained as per the design requirements in order to continue to reliably provide the appropriate level of protection.			
Funding	Moray Council Revenue			
Coordination	Moray Council will continue to maintain the scheme liaising with Responsible Authorities and the community on issues that may arise			

Action ID	Lhanbryde		39002
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	Moray Council	Indicative Delivery	2022-2023
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 will be evaluated. The impact of the sediment trap on the channel will be assessed as part of this.		
Funding	Moray Council Revenue		
Coordination	Moray Council will coordinate with Consultants and landowners to deliver this work		

Action ID	Lhanbryde		39003	
Action Type	Sewer flood risk assessment			
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027	
Description	Scottish Water will undertake a modelling assessment in the Lossiemouth sewer catchment to improve knowledge and understanding of flood risk in this area as required under Section 16 of the Flood Risk Management (Scotland) Act 2009			
Funding	Funding for this action is secured within Scottish Water's business plan			
Coordination	Outputs of this mode	elling assessment wil I SEPA	l be shared with	

## 2.4.4 02/05/04 (Kingston & 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

Kingston (target area 463)

Garmouth (target area 393)



River Spey

# 2.4.4.1 Kingston 463

Summary	Location Map
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.	Recroduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2012. All rights reserved. Ordnance Survey I icence number 1000/3422.

## 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.

Objective	ID	Description
Avoid flood risk	4631	Avoid inappropriate development that increases flood risk in Kingston
Prepare for flooding	4632	Prepare for current flood risk and future flooding as a result of climate change in Kingston

Action ID	Kingston		46301
Action Type	Data collection		
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
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.		
Funding	Moray Council Revenue		
Coordination	Moray Council will continue to take yearly survey in spring.		

Action ID	Kingston 46302			
Action Type	Adaptation plan			
Action Delivery Lead	Moray Council	Indicative Delivery	2022-2023	
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 will 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 register.			
Funding	Moray Council Capital Funds			
Coordination	The action delivery lead is The Moray Council and will work with Responsible Authorities /communities to deliver the appropriate outcomes			

Action ID	Kingston		46303
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the River Spey and the Moray Firth coastal flood warning schemes.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required		



Shingle Bank at Kingston

# 2.4.4.2 Garmouth 393

Summary	Location Map
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 overestimated. This is estimated to increase to 90 people and 60 homes and businesses by the 2080s due to climate change.	Reproduced by permise on of Ordhance Survey on behalf of HMSO.  © Grown copyright and database right 2012. All rights reserved.  Ordhance Survey Licence number 100003422.

## 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.

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

Action ID	Garmouth		39301
Action Type	Adaptation plan		
Action Delivery Lead	Moray Council	Indicative Delivery	2024-2026
Description	An adaptation plan will be developed in conjunction with community engagement. The plan will 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 register.		
Funding	Moray Council Revenue Fund		
Coordination	The action delivery lead is The Moray Council and will work with Responsible Authorities /communities to deliver the appropriate outcomes		

Action ID	Garmouth		39302
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA will maintain the River Spey and the Moray Firth coastal flood warning schemes.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

## 2.4.5 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 one 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)



Weir in Elgin

## 2.4.5.1 Elgin 392

# 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. Rearractured by permission of Ortherna Survey on behalf of HMSO. \*\*Crown copyright, and database fight 2012. All rights reserved.

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# 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.

Objective	ID	Description
Avoid flood risk	3921	Avoid an increase in flood risk by the appropriate management and maintenance of the Elgin Flood Protection Scheme
Avoid flood risk	3922	Avoid inappropriate development that increases flood risk in Elgin
Improve data and understanding	3923	Improve data and understanding of the performance of the flood protection assets in Elgin
Prepare for flooding	3924	Prepare for current flood risk and future flooding as a result of climate change in Elgin
Reduce flood risk	3935	Reduce the risk of surface water flooding in Elgin

Action ID	Elgin		39201
Action Type	Flood defence maintenance		
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
Description	Continue to maintain the Elgin Flood Alleviation Scheme.		
Funding	Moray Council Revenue		
Coordination	Moray Council will continue to maintain the scheme liaising with Responsible Authorities and the community on issues that may arise		

Action ID	Elgin		39202	
Action Type	Flood study (existing flood defences)			
Action Delivery Lead	Moray Council	Indicative Delivery	2022-2023	
Description	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 will be evaluated.			
Funding	Moray Council Revenue			
Coordination	Moray Council will coordinate with Consultants and landowners to deliver this work			

Action ID	Elgin	39203		
Action Type	Flood scheme or wo	orks design		
Action Delivery Lead	Moray Council	Indicative Delivery	2026-2028	
Description	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 will be progressed. Proposals could include development of new overland flood paths, installation of non-return valves and road re-profiling.  The delivery of this action is subject to capital funding being made available by Scottish Government.			
Funding	This work is subject to funding via the Scottish Government flood capital monies. This funding has not been allocated at the time of the production of this report.			
Coordination	The action delivery lead is The Moray Council in coordination with other Responsible Authorities including community engagement			

Action ID	Elgin		39204
Action Type	Community engagement		
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
Description	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 and building community resilience		
Funding	Moray Council Revenue		
Coordination	Moray will coordinate with Responsible Authorities to ensure that communities are aware of the risk and resilient to the risk of flooding		

Action ID	Elgin	39205		
Action Type	Flood scheme or works implementation			
Action Delivery Lead	Moray Council	Indicative Delivery	2027-2028	
Description	Progress the flood v reduce surface water	vorks based on the deer flood risk in Elgin.	etailed design to	
	The Responsible Authorities 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 by Scottish Government.			
Funding	This work is subject to funding via the Scottish Government flood capital monies. This funding has not been allocated at the time of the production of this report.			
Coordination	The action delivery lead is Moray Council in coordination with other Responsible Authorities including community engagement			

Action ID	Elgin		39206
Action Type	Flood warning main	tenance	
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing

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Description	SEPA should maintain the River Lossie flood warning scheme.
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.
Coordination	SEPA will work with Moray Council on the potential to use information from the flood studies to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.

# 2.4.6 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)



Arial photo of the River Findhorn

## 2.4.6.1 Forres 427

Summary	Location Map
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.	Reproduced by permission of Ordhance Survey on behalf of HMSO.  © Grown copyright and database right 2012. All rights reserved. Ordhance Survey Licence number 1000/3422.

# 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.

Objective	ID	Description
Avoid flood risk	4271	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

Avoid flood risk	4272	Avoid inappropriate development that increases flood risk in Forres
Improve data and understanding	4273	Improve data and understanding of the performance of the flood protection assets in Forres
Prepare for flooding	4274	Prepare for current flood risk and future flooding as a result of climate change in Forres
Reduce flood risk	4275	Reduce the risk of surface water flooding in Forres

Action ID	Forres		42701
Action Type	Flood defence maintenance		
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
Description	Continue to maintain the Forres (Burn of Mosset, 2005) Flood Alleviation Scheme and the Forres (Findhorn and Pilmuir, 2008) Flood Alleviation Scheme.		
Funding	Moray Council Revenue		
Coordination	,	continue to maintain the uthorities and the com	•

Action ID	Forres		42702
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	Moray Council	Indicative Delivery	2022-2023
Description	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.		
Funding	Moray Council Revenue		
Coordination	Moray Council will coordinate with Consultants and landowners to deliver this work		

Action ID	Forres		42703
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will undertake a modelling assessment in the Forres sewer catchment to improve knowledge and understanding of flood risk in this area as required under Section 16 of the Flood Risk Management (Scotland) Act 2009		
Funding	Funding for this action is secured within Scottish Water's business plan		
Coordination	Outputs of this modelling assessment will be shared with local authorities and SEPA		

Action ID	Forres		42704	
Action Type	Surface Water Management Plan			
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing	
Description	Continue to develop the Surface Water Management Plan, working with Scottish Water to identify opportunities with regard to surface water flooding in Forres			
Funding	Moray Council Revenue			
Coordination	The action delivery lead is The Moray Council and coordinated with Scottish Water.			

Action ID	Forres		42705
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA will maintain	the River Findhorn flo	ood warning scheme.
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with Moray Council on the potential to use information from the flood study to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		



Chapelton Flood Storage Reservoir.

## 2.4.7 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 one 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)



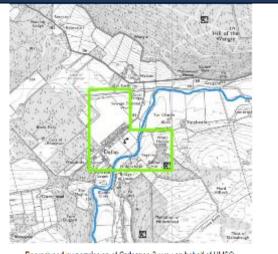
Dallas Flood Alleviation Scheme

### 2.4.7.1 Dallas 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**



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## 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.

Objective	ID	Description
Avoid flood risk	4211	Avoid inappropriate development that increases flood risk in Dallas
Avoid flood risk	4212	Avoid an increase in flood risk by the appropriate management and maintenance of the Dallas flood retaining embankment
Improve data and understanding	4213	Improve data and understanding of the performance of the flood protection asset in Dallas
Prepare for flooding	4214	Prepare for current flood risk and future flooding as a result of climate change in Dallas

Action ID	Dallas		42101
Action Type	Flood defence maintenance		
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
Description	Continue to maintain the existing flood defences in Dallas.		
Funding	Moray Council Revenue		
Coordination	•	ntinue to maintain the emba horities and the community	•

Action ID	Dallas		42102
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA will maintain the River Lossie flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with Moray Council on the potential to use information from the flood studies to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

Action ID	Dallas		42103
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	Moray Council	Indicative Delivery	2024-2025
Description	Assess the performance of the existing flood defences in Dallas. The impacts of climate change on flood risk will also be considered. As built drawings will be made available to SEPA, for inclusion in the Scottish Flood Defence Asset Database.		
Funding	Moray Council Revenue		
Coordination	Moray Council will coordinate with landowners to deliver this work		

## 2.4.8 **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)



River Nairn Annual Inspection

## 2.4.8.1 Nairn 428

Summary	Location Map
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.	Reproduced by permission of Ordnance Survey on behalf of HMSO © Crown copyright and database right 2012, All rights reserved. Ordnance Survey Licence number 100003422.

## 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.

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

Action ID	Nairn		42801	
Action Type	Flood study			
Action Delivery	Highland Council	Indicative Delivery	2022-2024	
Lead				
Description	The Highland Coun	cil to develop a coast	al flood model and a	
	flood model of the River Nairn and Auldern 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 Auldern			
	Burn.			
Funding	Allocated in The Highland Council Capital Programme			

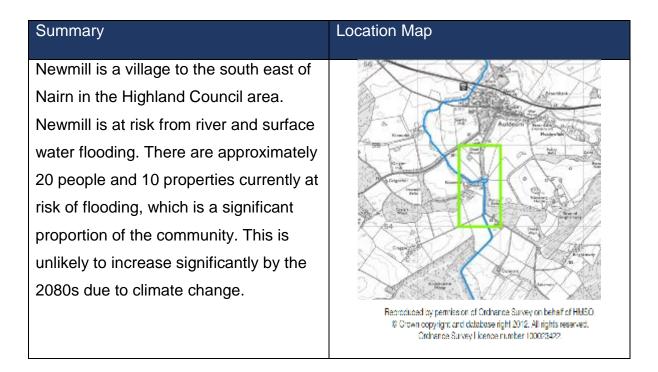
Coordination	SEPA will work with The Highland Council on the potential to
	coordinate this action with work on coastal flood mapping and
	flood warning actions.
	The Highland Council will coordinate the development of the
	Study with actions of other responsible authorities and
	engage local community groups.

Action ID	Nairn		42802	
Action Type	Strategic mapping improvements			
Action Delivery Lead	SEPA	Indicative Delivery	2023-2024	
Description	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.			
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.			
Coordination	SEPA will work with the local authority on the potential to coordinate the flood map update with any other actions being carried out to understand or reduce coastal flooding.			

Action ID	Nairn		42803
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Moray Firth coastal and River Nairn flood warning schemes.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with The Highland Council on the potential to use information from the flood study to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

Action ID	Nairn		42804	
Action Type	Flood study			
Action Delivery Lead	Highland Council	Indicative Delivery	2028-2034	
Description	Burn to determine the from the burn. Subjection	cil to develop a flood he extent of flood risk ect to the outcome of to mitigate flooding varied option.	to parts of Nairn the modelling an	
Funding	Not yet allocated in Capital Programme			
Coordination	The action delivery lead is The Highland Council			

## 2.4.8.2 Newmill (Nairn) 9992



#### 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.

Objective	ID	Description
Avoid flood risk	99921	Avoid inappropriate development that increases flood risk in Newmill
Prepare for flooding	99922	Prepare for current flood risk and future flooding as a result of climate change in Newmill
Reduce flood risk	99923	Reduce the risk of flooding in Newmill from the Auldearn Burn

Action ID	Newmill (Nairn)		999201		
Action Type	Flood risk management review				
Action Delivery	SEPA	Indicative Delivery	2022-2028		
Lead					
Description	No local actions spe	ecific to this target are	a have been		
	identified yet. There	are national actions	planned that will		
	cover this area, incl	uding an update to SI	EPA's surface water		
	flood maps and an t	update to the national	l 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.				
Funding	SEPA's role in this action is funded by Scottish Government				
	through SEPA's grant in aid settlement.				
Coordination	SEPA will work with the other responsible authorities to review flood risk management for this area, through the Local				
	Plan District Partnerships. A public consultation on priority				
	areas will be held in 2024 by SEPA, which will be open for				
	three months. A public consultation on future flood				

management actions will be held in December 2026 and will
be open for at least three months.

Action ID	Newmill (Nairn)		999202	
Action Type	Flood study			
Action Delivery Lead	Highland Council	Indicative Delivery	Cycle 3	
Description	Auldearn Burn to de from the burn. Subje	cil to develop a flood etermine the extent of ect to the outcome of to mitigate flooding varied option.	flood risk to Newmill the modelling an	
Funding	Not yet allocated in Capital Programme			
Coordination	The action delivery lead is The Highland Council			

#### 2.4.9 02/05/09 (Rothes & Aberlour)

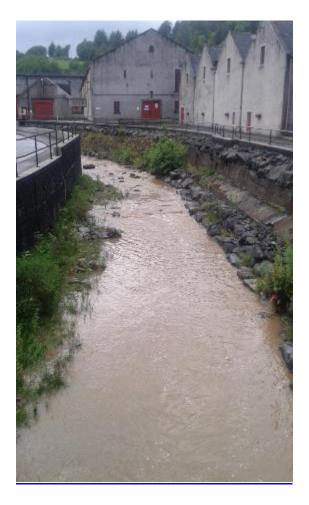
This area is designated as a Potentially Vulnerable Area due to the risk of surface water flooding in Aberlour and Rothes. River flood risk (including from the Back Burn, Burn of Rothes and Black Burn) is managed by the Rothes Flood Protection Scheme.

There are two 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

Rothes (target area 397)

Aberlour (target area 432)



Flash Flood in Rothes

#### 2.4.9.1 Rothes 397

# Summary **Location Map** Rothes is on the banks of the River Spey and is within the Moray Council area. The main source of flooding in Rothes 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. Reproduced by permission of Ordnance Survey on behalf of HMSO. This is likely to increase to 830 people © Crown copyright and database right 2012. All rights reserved. Ordnance Survey Licence number 1000/3422 and 560 homes and businesses by the 2080s due to climate change.

#### 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 Rothes, Back Burn and Black Burn is underpinned by the studies to develop the Rothes 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 Rothes, including notable flooding in September 2009 from the River Spey, the Back Burn and the Burn of Rothes, prior to the completion of the Rothes Flood Protection Scheme.

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

Action ID	Rothes		39701	
Action Type	Flood scheme or works design			
Action Delivery Lead	Moray Council	Indicative Delivery	2026-2027	
Description	flood risk is to be deflood study, including of climate change. works to improve catadaptive planning to be monitored, until the responsible automatical statements.	red approach for man esigned following the og consideration of the These can include sm atchment managemen o allow for the impacts derstood and manage thority proposes this a	completion of the e long-term impacts all scale works or at. This should guide s of climate change ed.	

	delivery of this action is subject to capital funding being made				
	available.				
	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.				
Funding	This works is subject to funding via the Scottish Government				
	flood capital monies. This monies has not been allocated at				
	the time of the production of this report.				
Coordination	The action delivery lead is The Moray Council in coordination				
	with other responsible authority including community				
	engagement				
	3-3				

Action ID	Rothes		39702
Action Type	Community engagement		
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
Description	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, and building community resilience		
Funding	Moray Council Revenue		
Coordination	Moray will coordinate with Responsible Authorities to ensure that communities are aware of the risk and resilient to the risk of flooding		

Action ID	Rothes	39703	
Action Type	Flood scheme or wo	orks implementation	
Action Delivery Lead	Moray Council	Indicative Delivery	2027-2028
Description	agreement of the de The responsible aut viable option for ma	flood scheme/works is esign, costs and times hority proposes this a naging flood risk in th n is subject to capital	action as the best is community. The
Funding	This works is subject to funding via the Scottish Government flood capital monies. This funding has not been allocated at the time of the production of this report.		
Coordination	The action delivery lead is The Moray Council in coordination with other Responsible Authorities including community engagement		

Action ID	Rothes		39704
Action Type	Flood defence main	tenance	
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
Description	Continue to maintain the Rothes Flood Protection Scheme (2011).		
Funding	Moray Council Revenue		
Coordination	Moray Council will continue to maintain the scheme liaising with Responsible Authorities and the community on issues that may arise		

Action ID	Rothes		39705
Action Type	Flood study (existing	g flood defences)	
Action Delivery Lead	Moray Council	Indicative Delivery	2023-2024
Description	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 will be evaluated.		
Funding	Moray Council Revenue		
Coordination	Moray Council will coordinate with Consultants and landowners to deliver this work		

Action ID	Rothes		39706
Action Type	Flood warning main	tenance	
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

#### 2.4.9.2 Aberlour 432

# Summary **Location Map** 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 Reproduced by permission of Ordnance Survey on behalf of HMSO businesses by the 2080s due to climate © Grown copyright and database right 2012. All rights reserved. Ordnance Survey Licence number 100023422 change.

## 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.

Objective	ID	Description
Avoid flood risk	4321	Avoid an increase in flood risk by the appropriate
		management and maintenance of the Aberlour -
		Moray Flood Prevention Scheme 1984
Avoid flood risk	4322	Avoid inappropriate development that increases
		flood risk in Aberlour
Improve data and	4323	Improve data and understanding of the Aberlour -
understanding		Moray Flood Prevention Scheme 1984
Prepare for flooding	4324	Prepare for current flood risk and future flooding
		as a result of climate change in Aberlour
Reduce flood risk	4325	Reduce the risk of surface water flooding to
		Aberlour

Action ID	Aberlour		43201
Action Type	Flood study (existing	g flood defences)	
Action Delivery	Moray Council	Indicative Delivery	2023-2024
Lead			
Description	Assess the perform	ance of the Aberlour	Flood Protection
	Scheme. The scher	ne was designed in th	ne 1980s. Since then
	new modelling techniques and data have emerged. The		
	impacts of climate change on flood risk will also be		
	considered. The need for an adaptation plan should be		
	evaluated.		
Funding	Moray Council Revenue		
Coordination	Moray Council will coordinate with Consultants and		
	landowners to deliver this work		

Action ID	Aberlour		43202
Action Type	Surface Water Mana	agement Plan	
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
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.		
Funding	Moray Council Revenue Funds		
Coordination	The action delivery with Scottish Water.	lead is The Moray Co	ouncil in coordination

Action ID	Aberlour		43203
Action Type	Flood defence main	tenance	
Action Delivery Lead	Moray Council	Indicative Delivery	Ongoing
Description	Continue to maintain the Aberlour Flood Protection Scheme.		
Funding	Moray Council Revenue		
Coordination	Moray Council will continue to maintain the scheme liaising with Responsible Authorities and the community on issues that may arise		

Action ID	Aberlour		43204
Action Type	Flood warning main	tenance	
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		



Flooding on the River Spey

## 2.4.10 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 Burn Annual Inspection.

#### 2.4.10.1 Aviemore 396

Summary	Location Map
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.	Reproduced by permission of Ordnance Survey on behalf of HMSO.  © Crown copyrigm, and adabase right 2012. All rights reserved. Ordnance Survey Licence number 1000/3422.

# 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.

Objective	ID	Description
Avoid flood risk	3961	Avoid inappropriate development that increases flood risk in Aviemore
Prepare for flooding	3962	Prepare for current flood risk and future flooding as a result of climate change in Aviemore

Reduce flood risk	3963	Reduce the risk of flooding from the River Spey
		and Aviemore Burn in Aviemore

Action ID	Aviemore		39601		
Action Type	Flood study				
Action Delivery Lead	Highland Council	Indicative Delivery	2022-2028		
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.				
Funding	Not currently allocated in THC Capital Programme				
Coordination	The action delivery lead is The Highland Council and coordination will be determined once the actions have been finalised, but would include Transport Scotland given their studies for A9 dualling.				

Action ID	Aviemore		39602
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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Action ID	Aviemore		39603
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Cycle 3
Description	SEPA should investigate improvements to the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use any information from any flood studies in the Spey catchment to inform ongoing flood warnings. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

## 2.4.11 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)



Gynack Burn Inspection.

## 2.4.11.1 Kingussie 395

Summary	Location Map
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.	Reproduced by permission of Ordhance Survey on behalf of HMSO.  © Crown copyright and database right 2012. All rights reserved.  Ordhance Survey Licence number 100003422.

# 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.

Objective	ID	Description
Avoid flood risk	3951	Avoid inappropriate development that increases flood risk in Kingussie
Prepare for flooding	3952	Prepare for current flood risk and future flooding as a result of climate change in Kingussie

Reduce flood risk	3953	Reduce the risk of flooding from the Gynack Burn
		in Kingussie

Action ID	Kingussie		39501	
Action Type	Flood study			
Action Delivery Lead	Highland Council	Indicative Delivery	2022-2028	
Description	The Highland Council has 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.			
Funding	Not currently allocated in THC Capital Programme			
Coordination	The action delivery lead is The Highland Council			

Action ID	Kingussie		39502
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by the Scottish Government through SEPA's grant in aid settlement		
Coordination	SEPA will work with the local authorities on the potential to use any information from any flood studies in the Spey catchment to inform ongoing flood warnings. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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Action ID	Kingussie		39503	
Action Type	Flood warning main	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Cycle 3	
Description	SEPA should investigate improvements to the River Spey flood warning scheme.			
Funding	SEPA's role in this action is funded by the Scottish Government through SEPA's grant in aid settlement			
Coordination	SEPA will work with the local authorities on the potential to use any information from any flood studies in the Spey catchment to inform ongoing flood warnings. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.			

## 2.4.12 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)



Loch na Leoaba Annual Inspection.

#### 2.4.12.1 Newtonmore 443

# Summary **Location Map** 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 Reproduced by permission of Ordnance Survey on behalf of HMSO. likely to increase to 140 people and 110 © Grown copyright and database right 2012. All rights reserved. Ordnance Survey Licence number 100023422. homes and businesses by the 2080s due to climate change.

#### 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 wide 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.

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

Action ID	Newtonmore		44301			
Action Type	Sewer flood risk ass	Sewer flood risk assessment				
Action Delivery Lead	Scottish Water	Indicative Delivery	2022/28			
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.					
Funding	Funding for this action is secured within Scottish Water's business plan					
Coordination	The action delivery lead is Scottish Water in coordination with the local authority and SEPA.					

Action ID	Newtonmore		44302		
Action Type	Surface Water Mana	agement Plan			
Action Delivery Lead	Highland Council	Indicative Delivery	2022/28		
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 alleivate this risk.				
Funding	Allocated in THC Capital Programme				
Coordination	The action delivery lead is The Highland Council in coordination with Scottish Water and other actions in the area.				

Action ID	Newtonmore		44303
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey Catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the services when require.		

Action ID	Newtonmore		44304
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Cycle 3
Description	SEPA should investigate improvements to the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey Catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the services when require.		

## 2.4.13 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)



River Truim Annual Inspection.

#### 2.4.13.1 Dalwhinnie 394

Summary	Location Map
Dalwhinnie is on the edge of the Cairngorms National Park in the Highland Council area. The main source	All Control of the Co
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	Dalwateria Control of
significant proportion of the community. This is not expected to change significantly by the 2080s due to climate change.	Reproduced by permission of Ordnance Survey on behalf of HMSO.  © Crown copyright and database right 2012. All rights reserved.  Ordnance Survey I kence number 100003422.

## 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.

Objective	ID	Description
Avoid flood risk	3941	Avoid inappropriate development that increases flood risk in Dalwhinnie

Improve data and	3942	Improve data and understanding of the risk of
understanding		river flooding in Dalwhinnie
Prepare for flooding	3943	Prepare for current flood risk and future flooding as a result of climate change in Dalwhinnie

Action ID	Dalwhinnie		39401	
Action Type	Flood risk management review			
Action Delivery Lead	SEPA	Indicative Delivery	2022-2028	
Description	No local actions spe	ecific to this target are	a have been	
	identified yet. There	are national actions	planned that will	
	cover this area, incl	uding an update to SI	EPA's surface water	
	flood maps and an u	update to the national	flood risk	
	assessment. These	, along with other acti	ions that are carried	
	out across the whole local plan district covering this area, wi help to manage flood risk in the long term. The need for actions for this area will be reviewed again in 2026.			
Funding	SEPA's role in this a	action is funded by So	cottish Government	
	through SEPA's gra	nt in aid settlement.		
Coordination	SEPA will work with	the other responsible	e authorities to	
	review flood risk ma	nagement for this are	ea, through the Local	
	Plan District Partne	rships. A public consu	ultation on priority	
	areas will be held in 2024 by SEPA, which will be open for			
	three months. A public consultation on			
	management action	s will be held in Dece	ember 2026 and will	
	be open for at least	three months.		

#### 2.4.14 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 one 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)



Findhorn Bay at the Mouth of the River Findhorn

#### 2.4.14.1 Kinloss 420

# Summary **Location Map** 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 Reproduced by permission of Ordnance Survey on behalf of HMSO. to 390 people and 270 homes and © Grown copyright and database right 2012. All rights reserved. Ordnance Survey Licence number 100023422 businesses by the 2080s due to climate change.

#### 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.

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

Action ID	Kinloss		42001
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will undertake a modelling assessment in the Forres sewer catchment to improve knowledge and understanding of flood risk in this area as required under Section 16 of the Flood Risk Management (Scotland) Act 2009		
Funding	Funding for this action is secured within Scottish Water's business plan		
Coordination	Outputs of this modelling assessment will be shared with local authorities and SEPA		

Action ID	Kinloss		42002
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA will maintain the Moray Firth coastal flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies around the Moray Firth coast to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the services when require.		

Action ID	Kinloss		42003	
Action Type	Data collection			
Action Delivery	Moray Council	Indicative Delivery	2026-2028	
Lead				
Description	Data collection and	monitoring will be car	rried out to improve	
	the confidence in flo	ood sources, mechani	isms and risk. A	
	review may be requ	ired to assess the ne	ed for rain and/or	
	river gauges. Post flood event surveys may be required to			
	collect data on flooding mechanisms, risk and damage			
	caused.			
Funding	Moray Council Revenue			
Coordination	The action delivery lead is The Moray Council working with			
	SEPA and Scottish water to ensure appropriateness of			
	results			

Action ID	Kinloss		42004
Action Type	Flood study		
Action Delivery Lead	Moray Council	Indicative Delivery	2026-2027
Description	A flood study will be carried out to improve understanding of flood risk in Kinloss. The impacts of climate change on flood risk should be assessed.		
Funding	Moray Council Revenue		
Coordination	The action delivery lead is The Moray Council in coordination with other responsible authority including community engagement.		

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Local Flood risk management plans: Findhorn, Nairn and Speyside Local Plan District (LPD 5)

# 2.4.15 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)

# Local Flood Risk Management plan datasheet

# 2.4.15.1 Nethy Bridge 434

# 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. Reproduced by permission of Ordnarce Survey on behalf of HMSO. Crown copyright and database right 2012. All rights reserved. Ordnarce Survey Licence number 100023422

# 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.

Objective	ID	Description
Avoid flood risk	4341	Avoid inappropriate development that increases flood risk in Nethy Bridge
Improve data and understanding	4342	Improve data and understanding of the risk of flooding from the River Nethy in Nethy Bridge
Prepare for flooding	4343	Prepare for current flood risk and future flooding as a result of climate change in Nethy Bridge

Action ID	Nethy Bridge		43401
Action Type	Flood study		
Action Delivery Lead	Highland Council	Indicative Delivery	2024-2026
Description	Nethy and Duack B Nethy Bridge from t outcome of the mod	cil to develop a flood urn to determine the one he river and the burn delling an appraisal of ied out, determining a	extent of flood risk to  Subject to the options to mitigate
Funding	Not currently allocated in THC Capital Programme		
Coordination	The action delivery lead is The Highland Council and coordination will be determined once the actions have been finalised.		

Action ID	Nethy Bridge		43402
Action Type	Community flood alert		
Action Delivery Lead	Nethy Bridge Community	Indicative Delivery	Cycle 2

Description	A river level alerting system is being installed with the help of	
	the Scottish Flood Forum.	
Funding	Not currently allocated in THC Capital Programme	
Coordination	The action delivery lead is the community and coordination will be determined once the actions have been finalised.	

Action ID	Nethy Bridge		43403
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the River Spey flood warning scheme.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to use information from any flood studies in the Spey catchment to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

Action ID	Nethy Bridge		43404
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Cycle 3
Description	SEPA should investigate improvements to the River Spey flood warning scheme.		

Funding	SEPA's role in this action is funded by Scottish Government		
	through SEPA's grant in aid settlement.		
Coordination	SEPA will work with the local authorities on the potential to		
	use information from any flood studies in the Spey catchment		
	to inform ongoing flood warning. SEPA will continue to raise		
	awareness of flood warning, and engage with communities		
	about the service when required.		

# 3 Next Steps

# 3.1 Next Steps and Monitoring Progress

This Plan will run for six years from 2022. Over this period the Findhorn, Nairn and Speyside LPD partnership will meet from time to time to monitor progress on implementing the actions detailed in Section two of the Plan. Each partner organisation will receive reports through its governance processes and actions arising will be considered by the Steering Group.

Between years two and three of the cycle (i.e. before December 2025), Moray Council, as lead local authority will publish a report on the conclusions of a review of the Plan, including information on the progress that has been made towards delivering the actions identified in the Plan.

Between years five and six of the cycle (i.e. before June 2028), Moray Council, as lead local authority will publish a report on the Plan containing an assessment of the progress made towards delivering the "current actions", a summary of the actions not implemented, with reasons why, and a description of any other actions undertaken since the plan was finalised, which the lead local authority considers have contributed to the achievement of the objectives in the Plan.

Moray Council will make these reports available for public inspection.

# 4 Annexes

# 4.1 Links to Schedules of Clearance and Repair

# S18 Schedule of Clearance and Repair

The following are links for each local authority to access schedules of clearance and repair under Section 18 of the Flood Risk Management (Scotland) Act 2009:

Local Authority	Method of public access to the S18 Schedule	Hyperlink or web access
The	Website	www.moray.gov.uk/flooding
Moray		
Council		
The	Website	www.highland.gov.uk/info/1210/environment/81/flooding/5
Highland		
Council		

# 4.2 Supporting Information

# 1. Sources of flooding described in the National Plans and this Plan

The Plan and this Local Plan address the risk of flooding from rivers, the coast and surface water. The risk of flooding from rivers is usually due to rainfall causing a river to rise above bank level spreading out and inundating adjacent areas. Coastal flooding is where the risk is from the sea. Sea levels can change in response to tidal cycles or atmospheric conditions. Over the longer term sea levels and coastal flood risk may change due to climate change. Surface water flooding happens when rainwater does not drain away through the normal drainage systems or soak into the ground, but lies on or flows over the ground instead.

There can be interactions between these sources of flooding, but for the purposes of this Plan they are dealt with independently.

The following aspects of flooding have not been incorporated:

- Groundwater is generally a contributing factor to flooding rather than the primary source. It is caused by water rising up from underlying rocks or flowing from springs.
- Reservoir breaches have been assessed under separate legislation. Further information and maps can be found on SEPA's website.
- The Act does not include powers for SEPA or responsible authorities to assess or manage coastal erosion. responsible authorities have included consideration of erosion in the Plan by identifying areas that are likely to be vulnerable to erosion and therefore where erosion can exacerbate flood risk. As part of considering where actions might deliver multiple benefits, responsible authorities have looked to see where the focus of coastal flood risk management studies coincides with areas of high susceptibility to coastal erosion. Subsequent detailed studies and scheme design will need to consider how coastal flood risk management actions interact with coastal erosion. The Moray Council has a policy in relation to erosion whereby it may

take action if erosion may substantially increase flood risk or its assets are at risk.

• Wave overtopping. The information on coastal flooding in the Plan is based on SEPA modelling using still water level predictions. The method used simplifies the coastal processes and flooding mechanisms at work during a storm. Wave overtopping cannot be accurately modelled at a national scale due to the importance of local factors such as prevailing wind conditions, the depth and profile of the near-shore sea bed or the influence of any existing defences or management structures. As a result the Plan underestimates coastal flood risk in some areas. Conversely, in locations with wide and flat floodplains, the modelling may overestimate flood risk because the volumes of water able to inundate an area over a tidal cycle are not taken into account. Where wave overtopping has been specifically identified as a concern – but where no further detailed modelling is available – particular compensation has been made in the selection of appropriate actions to address coastal flood risk.

# 2. Understanding commonly used terms in flood risk management

Below are explanatory notes for the approach taken in this strategy and commonly used terms in flood risk management. A glossary of terms is also available.

• Reference to flood risk. During the development of the Plan flood risk has been assessed over a range of likelihoods. For consistency in reporting information within the Plan, unless otherwise stated, all references to properties or other receptors being 'at risk of flooding' refer to a medium likelihood flood (up to a 1 in 200 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 1 in 10 chance/likelihood and 1 in 1000 chance/likelihood of flooding in any given year respectively.

Likelihood of flooding	Return Period
High	10 year

Medium	200 year
Low	1000 year

# 3. Flood Risk Management Planning Process

Flood risk management in Scotland aims to manage flooding in a sustainable way. Sustainable flood risk management considers where floods are likely to occur in the future and takes action to reduce their impact without moving the problem elsewhere. It considers all sources of flooding, whether from rivers, the sea or from surface water. It delivers actions that will meet the needs of present and future generations whilst also protecting and enhancing the environment.

The sustainable approach to managing flood risk works on a six year planning cycle, progressing through the key stages outlined below.

# Identifying priority areas at significant flood risk

The first step to delivering a risk-based, sustainable and plan-led approach to flood risk management was SEPA's **National Flood Risk Assessment**. The assessment considered the likelihood of flooding from rivers, groundwater and the sea, as well as flooding caused when heavy rainfall is unable to enter drainage systems or the river network. The likelihood of flooding was examined alongside the estimated impact on people, the economy, cultural heritage and the environment. It significantly improved our understanding of the causes and consequences of flooding, and identified areas most vulnerable to floods.

Based on the National Flood Risk Assessment, SEPA identified areas where flooding was considered to be nationally significant. These areas are based on catchment units as it is within the context of the wider catchment that flooding can be best understood and managed. These nationally significant catchments are referred to as **Potentially Vulnerable Areas**. In Scotland, 235 Potentially Vulnerable Areas were identified. They are estimated to contain ~90% of the Scotland's flood risk.

The National Flood Risk Assessment will be updated in 2024 to inform each subsequent planning cycle.

# Improving the understanding of flooding

SEPA developed **flood hazard and flood risk maps**. These maps improved our understanding of flooding and helped inform the subsequent selection of actions to manage flood risk in Potentially Vulnerable Areas. The flood hazard maps show information such as the extent of flooding, water level, as well as depth and velocity where appropriate. The flood risk maps provide detail on the impacts on people, the economy, cultural heritage and the environment.

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. Flood hazard and flood risk maps and the assessment of the potential for natural flood management can be viewed on the SEPA website <a href="https://www.sepa.org.uk">www.sepa.org.uk</a>.

# Identifying objectives and selecting actions

The objectives and actions to manage flooding will provide the long-term vision and practical steps for delivering flood risk management in Scotland.

Working collaboratively with local partnerships, SEPA has agreed the objectives for addressing the main flooding impacts. Actions that could deliver these agreed objectives have been appraised for their costs and benefits to ensure the right combinations are identified and prioritised. The actions considered in the development of this strategy include structural actions (such as building floodwalls, restoring flood plains, or clearance and repair works to rivers) and non-structural actions (such as flood warning, land use planning or improving our emergency response). Structural and non-structural actions should be used together to manage flood risk effectively.

An assessment of the potential for natural flood management was used to help identify opportunities for using the land and coast to slow down and store water. Natural flood management actions were recommended in areas where they could contribute to the management of flood risk. In such instances these actions were put forward as part of flood protection or natural flood management studies.

# 4.3 Acknowledgements

The Moray Council gratefully acknowledges the cooperation and input that various parties have provided, including inter alia, the following organisations:

### **SEPA**

The Moray Council and The Highland Council acknowledge the inclusion of text generated by SEPA in preparation of the Findhorn, Nairn and Speyside Flood Risk Management Strategy. Figures and Maps produced by SEPA for Findhorn, Nairn and Speyside Flood Risk Management Strategy have been reproduced in the Findhorn, Nairn and Speyside Local Flood Risk Management Plan with authorisation from SEPA under SEPA Licence number 100016991 (2020).

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### Local authorities

Lead authorities acknowledge 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**

Moray Council and The Highland Council acknowledge the inclusion of surface water flooding data generated by Scottish Water in preparation of flood risk information.

# **OFFICIAL - CONFIDENTIAL**

Local Flood risk management plans: Findhorn, Nairn and Speyside Local Plan District (LPD 5)

The Met Office, James Hutton Institute and British Geological Survey contributed to the 2018 NFRA published by SEPA, more information on which can be found at <a href="https://www.sepa.org.uk/data-visualisation/nfra2018/">https://www.sepa.org.uk/data-visualisation/nfra2018/</a>