FRONT COVER

Clyde and Loch Lomond Local Plan District

Local Flood Risk Management Plan – Cycle 2

Published by Glasgow City Council

(Front cover to show a montage of flood risk management projects across the Local Plan District)

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Foreword

The impacts of flooding experienced by individuals, communities and businesses can be devastating and long lasting. It is vital that we continue to reduce the risk of any such future events and improve our ability to manage and recover from any events which do occur.

The publication of the Cycle 2 Local Flood Risk Management Plan for the Clyde and Loch Lomond Local Plan District is an important next step on this journey. This new Local Plan builds on the work undertaken during Cycle 1 and sets out our aspiration to further reduce the damage and distress caused by flooding over the next planning cycle from 2022 to 2028. This Local Plan should be read in conjunction with the SEPA Plan that was published in December 2021. Both documents support the implementation of the Flood Risk Management (Scotland) Act 2009.

The Clyde and Loch Lomond Local Flood Risk Management Plan is published by Glasgow City Council on behalf of a partnership comprising 10 local authorities - Argyll and Bute Council, East Dunbartonshire Council, East Renfrewshire Council, Glasgow City Council, Inverclyde Council, North Lanarkshire Council, Renfrewshire Council, South Lanarkshire Council, Stirling Council and West Dunbartonshire Council – SEPA and a number of responsible authorities - Scottish Water and the Loch Lomond and the Trossachs National Park Authority.

In summary, there are 23 catchments that have been designated as being Potentially Vulnerable Areas within the Clyde and Loch Lomond Local Plan District. These are areas within which clusters of properties are at significant risk of flooding. Across the Local Plan District there are 98,000 homes and business premises at risk of flooding. The estimated annual average damage of these flood risks is approximately £70 million per annum.

This Plan presents actions to avoid and reduce the risk of flooding and prepare and protect ourselves and our communities within these potentially vulnerable areas and across the Local Plan District. These actions include flood protection schemes, flood protection studies, flood warning schemes, surface water management plans and natural flood management studies.

Reducing flood risk is a shared responsibility as everyone is responsible for protecting themselves and their property from flooding. The publication of this Plan shows that the coordinated and collaborative efforts of public bodies can be brought together to deliver sustainable outcomes.

This Plan therefore provides the blueprint upon which local authorities, SEPA, Scottish Water and other responsible authorities will seek to deliver their flood risk management responsibilities in a sustainable manner. However, the actions in this Plan can only be delivered with the continued support of all the public bodies, The Scottish Government and, most importantly, you and your communities.

I would like to thank all those who contributed to the development of this Plan which will help shape the way in which flood risk and the impacts of flooding are reduced across the Clyde and Loch Lomond Local Plan District.

Convenor, Clyde and Loch Lomond Local Plan District Joint Committee

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List of Acronyms and Abbreviations

AAD	Average Annual Damages
BCR	Benefit Cost Ratio
CaLL	Clyde and Loch Lomond
CoSLA	Convention of Scottish Local Authorities
CSO	Combined Sewer Overflow
EIA	Environmental Impact Assessment
FPS	Flood Prevention / Protection Scheme
FRA	Flood Risk Assessment
FRM	Flood Risk Management
FRM Act	Flood Risk Management (Scotland) Act 2009
FRMP	Flood Risk Management Plan
FRMS	Flood Risk Management Strategies (prepared by SEPA)
HRA	Habitats Regulations Appraisal
ICS	Integrated Catchment Study
LA	Local Authority
LFRMP	Local Flood Risk Management Plan
LLA	Lead Local Authority
LNR	Local Nature Reserve
LDP	Local Development Plan
LPD	Local Plan District
MGSDP	Metropolitan Glasgow Strategic Drainage Partnership
NFM	Natural Flood Management
NFRA	National Flood Risk Assessment
PVA	Potentially Vulnerable Area
PLP	Property Level Protection
Q&S	Quality and Standards
RA	Responsible Authority
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SAIFF	Scottish Advisory and Implementation Forum for Flooding
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency
SG	Supplementary Guidance
SNH	Scottish Natural Heritage
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage System
SWMP	Surface Water Management Plan
UID	Unsatisfactory Intermittent Discharge

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1 Flood Risk Management in the Clyde and Loch Lomond Local Plan District

1.1 Managing flooding in Scotland

Flooding in Scotland is managed sustainably through a plan led approach 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.

The Flood Risk Management (Scotland) Act 2009 introduced six-year planning cycles including the preparation of a Local Flood Risk Management Plan every cycle. This enables flood risk management actions to be developed based on new data, improved techniques and our developing knowledge and understanding of flooding. 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.

The Clyde and Loch Lomond Local Plan District is one of 14 Local Plan Districts (LPDs) that cover the whole of Scotland. The boundaries between Local Plan Districts are based on river catchments.

1.2 What is a Local Flood Risk Management Plan?

A Local Flood Risk Management Plan (the 'Local Plan') is required to be produced every six years under the Flood Risk Management (Scotland) Act 2009. This Local Plan for the Clyde and Loch Lomond LPD is for Cycle 2 and will be delivered between 2022 and 2028, building on the work undertaken during Cycle 1 (2016 – 2022). The progress achieved during the previous six-year period is set out in the Cycle 1 Final Report, available here – [Insert Link]. Each of the 14 Local Plan Districts will be publishing a similar Local Plan.

The Local Plan has been developed to provide additional detail relating to the actions set out in the Flood Risk Management Plan (the 'SEPA Plan'). The SEPA Plan for the Clyde and Loch Lomond LPD, published in December 2021, is available on the SEPA website here – https://www2.sepa.org.uk/frmplans/documents/lpd11-clyde-and-loch-lomond-frmp-2021.pdf.

The Local 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 Plan facilitates the coordination of efforts to reduce flood risk. This is achieved by working in partnership with all organisations responsible for flood risk management and the Local 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.

Where funding has been confirmed, the Local Plan sets out how and when prioritised risk-based actions to reduce the impact of flooding in the LPD will be delivered. A revised version of the Plan will be published on confirmation of the funding position by The Scottish Government and COSLA for the other actions.

The Local Plan is published by Glasgow City Council as Lead Authority for the Clyde and Loch Lomond LPD. The Local Plan has been prepared in collaboration with and agreed by Argyll and Bute Council, East Dunbartonshire Council, East Renfrewshire Council, Inverclyde Council, North Lanarkshire Council, Renfrewshire Council, South Lanarkshire Council, Stirling Council and West Dunbartonshire Council, SEPA, Scottish Water and Loch Lomond and the Trossachs National Park Authority.

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

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 Local 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 the Clyde and Loch Lomond LPD. Some of the key roles are outlined below.

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 https://map.sepa.org.uk/floodmaps

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- Sign up to Floodline to receive messages when flooding is forecast in your area https://www.floodlinescotland.org.uk/
- Know who to contact if flooding happens https://www.sepa.org.uk/media/28952/who_to_contact_2014.pdf

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

The ten local authorities led by Glasgow City Council within the Clyde and Loch Lomond LPD are responsible for working together to prepare and deliver the Local Plan and work in partnership with SEPA, Scottish Water and other responsible authorities.

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 local authorities, SEPA 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) Loch Lomond & Trossachs National Park Authority

The National Park Authority works with local authorities, SEPA and other responsible authorities to develop and deliver the Local Plan. 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 Local

Plan and the delivery of collaborative projects. This reflects the widely held view that forestry can play a significant role in managing flooding.

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

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

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

1.3.3 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 were held in 2021, jointly with SEPA, during the development of the SEPA Plan and the Local Plan. The consultation covered information on the objectives and actions planned for each target area within the Clyde and Loch Lomond LPD. The consultation was promoted by both Glasgow City Council and SEPA. The consultation responses inform the prioritisation of actions.

1.4 Links with other plans and policies

The Local Plan does not stand in isolation. As far as is practicable, an integrated approach to land and water management has been pursued. When developing the SEPA and Local Plans, early links were made with other relevant aspects of water and land management including local development plans, river basin management plans and emergency plans. In turn, the responsible authorities will work proactively to ensure the findings from the Plans will influence other planning initiatives in an interactive and iterative cycle. Making these links has helped identify opportunities to deliver multiple benefits from flood risk management goals, objectives and actions.

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 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 has worked to ensure that there is integration and coordination between the river basin management plan and the SEPA Plan which informs the Local Plan. This coordination, particularly in regard to consultation and engagement, is important for stakeholders who have an interest in the objectives of the various plans.

Local Development Plans

Planning plays a vital role in flood risk management. Scottish Planning Policy requires that Local Development Plans take account of the SEPA and Local Plans. Local Development Plan strategies and policies, together with associated Supplementary Guidance, should set the direction of travel for making space for water and sustainable management of flood risk. Local Authorities may develop Area Specific Guidance to manage areas such as those where Surface Water Management Plans are programmed, and Local Development Plan policies and associated Supplementary Guidance may require that this is taken into consideration when making decisions on planning proposals. Integrating flood risk management and planning will be iterative and will develop through the Local Development Plan

and Flood Risk Management Planning Cycles. Scottish Planning Policy presumes against building on floodplains unless in exceptional circumstances.

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.

Scottish Water Investment Plans

There is a close relationship between the SEPA and Local Plans and Scottish Water's 25-year strategic plan. Sewer flooding 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. The Scottish Water policy position of only allowing new surface water connections to the combined sewer network in exceptional circumstances helps to mitigate any increases in sewer flooding.

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 each local authority who use 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 relevant Council's schedule of clearance and repair.

1.5 Next steps and monitoring progress

Glasgow City 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 the Clyde and Loch Lomond LPD through Cycle 2 and subsequent planning cycles.

Progress will be monitored by the Clyde and Loch Lomond LPD Joint Committee that brings together an elected member from each of the 10 local authorities. Supporting the work of the Joint Committee is the Clyde and Loch Lomond LPD Senior Officers Group.

Glasgow City Council will publish an Interim Report in 2025 setting out the progress achieved on delivering the actions in the Local Plan. A Final Report for Cycle 2 will be published in 2028.

During Cycle 2, the preparation for Cycle 3 (2028 – 2034) will also be undertaken.

1.5.1 Delivery of Local Authority actions requiring capital funding

The distribution of Scottish Government capital grant funding for flood risk management actions for the period 2022 – 2028 is currently being considered by a flood risk management working group[1]. This group will put forward options and recommendations to Scottish Ministers and COSLA, through the Settlement and Distribution Group, for consideration. A decision has not been made in time for the publication of this plan.

Given the uncertainty of future capital funding, none of the local authority actions in the Local Plan that potentially relate to a capital project have been prioritised. On confirmation of the funding position by the Scottish Government and COSLA, the prioritisation of local authority actions shall be agreed with the Clyde and Loch Lomond LPD Joint Committee and a revised Local Plan published.

[1] 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.

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As such it should be noted that it may not be possible for all local authority actions identified in the Local Plan to be taken forward. Inclusion of an action in the Local Plan does not 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 the Clyde and Loch Lomond LPD. The delivery of the Local Plan may have to be adapted to reflect wider developments in public funding, the ability of responsible authorities to access funding from other sources, pandemic recovery, and other national priorities.

1.5.2 Licensing acknowledgements

Full data licensing acknowledgements can be found in Annex 6 of this plan.

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2 Flood Risk Management in Clyde and Loch Lomond Local Plan District

This chapter provides an overview of the Clyde and Loch Lomond LPD, presents the LPD wide actions and thereafter for each Potentially Vulnerable Area (PVA) identifies the actions for the Objective Target Areas within each PVA.

2.1 Overview of Clyde and Loch Lomond LPD

The Clyde and Loch Lomond Local Plan District extends from Loch Lomond in the north to Leadhills in the south and includes part of the Loch Lomond and The Trossachs National Park. The LPD has a total area of approximately 4,800km2 and is served by 10 local authorities.

Across the LPD there are 98,000 homes and business premises at risk of flooding. Information on the causes of flooding is provided in the SEPA Plan (https://www2.sepa.org.uk/frmplans/documents/lpd11-clyde-and-loch-lomond-frmp-2021.pdf). The estimated annual average damage of these flood risks is approximately £70 million per annum.

The vast majority of properties at risk of flooding within the LPD are located within the 23 Potentially Vulnerable Areas shown below. Potentially Vulnerable Areas (PVAs) are a key building block of flood risk management planning. The areas now covered by a PVA was an output from the 2nd national flood risk assessment (https://www.sepa.org.uk/data-visualisation/nfra2018/) completed in 2018 taking into account the current and / or future risk from all sources of flooding.

To provide a greater focus for actions within a PVA, Target Areas have been created as part of the Cycle 2 planning process. These usually relate to specifically named communities that are exposed to a greater risk of flooding.

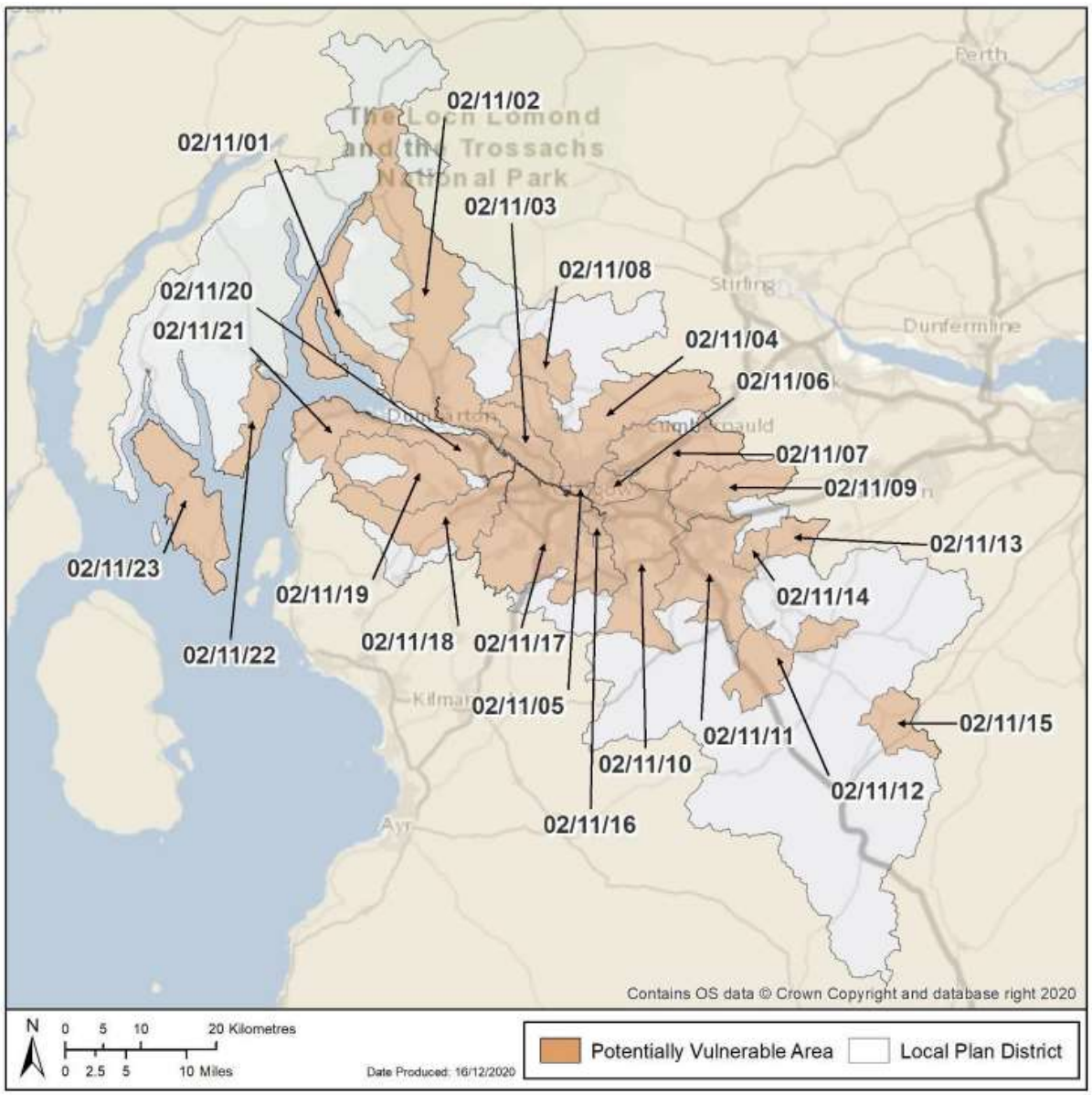


Figure 1: Clyde and Loch Lomond Local Plan District with Potentially Vulnerable Areas identified

2.2 Actions across the Local Plan District

Some flood risk management objectives and actions apply to all areas, whether designated as a Potentially Vulnerable Area or not. For example, flood risk can be managed through national planning policy or as part of ongoing statutory duties discharged by local authorities.

The Local Plan District-wide objectives and the corresponding actions are set out in the table below.

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Local Plan District Wide - Ongoing Actions that are applicable across the entire Local Plan District / all PVAs			
Action Type	**Objective Description**	**Lead Authority**	**Action Description**
Awareness raising		Local authorities, SEPA and Scottish Water	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 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		SEPA	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		Category 1 and 2 Responders	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		SEPA and Met Office	The Scottish Flood Forecasting Service is a partnership between SEPA and the Met Office. The service continues to produce a daily, national flood guidance statement, issued to emergency responders, local authorities, and other organisations with flood risk management duties. As the flood warning authority for Scotland SEPA continues to provide its flood warning service issuing flood alerts and warnings when required, giving people a better chance of reducing the impact of flooding on their home or business.

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Local Plan District Wide - Ongoing Actions that are applicable across the entire Local Plan District / all PVAs			
Action Type	**Objective Description**	**Lead Authority**	**Action Description**
Flood warning development framework	SEPA	SEPA will publish a new flood warning development framework by March 2022, which will detail its ambitions and strategic actions to maintain and improve our flood warning service across Scotland. SEPA will continue to develop the Scottish Flood Forecast, a 3 day forecast of flood risk across Scotland and bring together all live information such as flood warnings, river levels and rainfall data into a central hub easily accessible for the public. Working in close partnership with the Met Office through the Scottish Flood Forecasting Service, SEPA will develop its capability in surface water flooding forecasting, focusing initially on the transport sector to support climate-ready infrastructure. SEPA will also undertake a prioritised improvement programme of existing river and coastal flood warning schemes to provide more accurate forecast with improved lead time.	
Future flood risk management planning	SEPA	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. SEPA will plan for a better future by publishing their flooding services strategy in 2022 with a clear and measurable delivery plan. SEPA will put greener, fairer communities at the heart of their 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. SEPA will investigate alternative sources of finance to tackle flooding and drive forward practical options for adaptation.	
Guidance development	SEPA	The Scottish Government and SEPA will develop and update guidance to inform flood risk management projects. This guidance will be produced in 2022 and will look at how best to adapt to the long-term impacts of climate change and the most appropriate methods of assessing the benefits of flood risk management actions. 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.	
Hazard mapping updates	SEPA	An understanding of flooding is essential to develop a plan led risk-based approach to flood risk management. SEPA will continue to update their national hazard mapping, which shows the likelihood of flooding in Scotland from different flooding sources: 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.	

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Local Plan District Wide - Ongoing Actions that are applicable across the entire Local Plan District / all PVAs			
Action Type	**Objective Description**	**Lead Authority**	**Action Description**
Land use planning	Planning authority		Local authorities, National Park Authority, 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 may place further requirements within their area of operation to restrict inappropriate development and prevent unacceptable risk.
Maintenance	Local authorities, asset / land managers		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	SEPA		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	SEPA		Understanding the future impacts of climate change remains a central theme of SEPA's flood risk management activity. SEPA will use the latest UK information on climate change to support an improved understanding of the changes in flood risk across the 21st century. SEPA will use the most suitable data to develop the national flood risk assessment (NFRA) 2024. This assessment will be used to identify future potentially vulnerable areas.
National surface water mapping	SEPA		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.

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Local Plan District Wide - Ongoing Actions that are applicable across the entire Local Plan District / all PVAs			
Action Type	**Objective Description**	**Lead Authority**	**Action Description**
Reservoirs	SEPA		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	SEPA		The Scottish Flood Defence Asset Database (SFDAD) 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	Local authorities, SEPA and Scottish Water		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/ https://www.biba.org.uk/current-issues/flood-insurance/ https://floodlinescotland.org.uk/ https://scottishfloodforum.org/ Responsible authorities and SEPA will continue to develop the understanding of flood risk to communities and promote measures to help individuals and businesses to reduce their risk.

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2.3 The Clyde and Loch Lomond PVAs

The 23 Potentially Vulnerable Areas (PVAs) situated within the Clyde and Loch Lomond LPD are listed below. Within each PVA there are up to 14 Target Areas.

Click the blue text to select your area of interest

PVA Ref	PVA Name	Local authority area	Page number
02/11/01	Helensburgh to Loch Long	Argyll & Bute	
02/11/02	Loch Lomond and Vale of Leven	Argyll & Bute, West Dunbartonshire	
02/11/03	Yoker catchment - Clydebank to Partick	Glasgow City, West Dunbartonshire	
02/11/04	River Kelvin	East Dunbartonshire, Glasgow City, North Lanarkshire	
02/11/05	Glasgow City Centre	Glasgow City	
02/11/06	Glasgow City North	Glasgow City	
02/11/07	Luggie Water catchment	East Dunbartonshire, North Lanarkshire	
02/11/08	Strathblane	Stirling	
02/11/09	Coatbridge and Airdrie	North Lanarkshire	
02/11/10	East of Glasgow to Strathaven	Glasgow City, South Lanarkshire	
02/11/11	Clyde catchment - Motherwell to Larkhall	North Lanarkshire, South Lanarkshire	
02/11/12	Clyde catchment - Lanark to Lesmahagow	South Lanarkshire	
02/11/13	Shotts	North Lanarkshire	
02/11/14	North of Wishaw	North Lanarkshire	
02/11/15	Symington and Coulter	South Lanarkshire	

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02/11/16	Rutherglen	Glasgow City, South Lanarkshire	
02/11/17	White Cart Water catchment	East Renfrewshire, Glasgow City, Renfrewshire, South Lanarkshire	
02/11/18	Black Cart Water catchment - Lochwinnoch to Johnstone	Renfrewshire	
02/11/19	Gryfe catchment	Inverclyde, Renfrewshire	
02/11/20	Clyde South and Bishopton	Inverclyde, Renfrewshire	
02/11/21	Greenock and Gourock	Inverclyde	
02/11/22	Dunoon	Argyll & Bute	
02/11/23	Isle of Bute	Argyll & Bute	

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2.3.1 PVA 02/11/01 (Helensburgh to Loch Long)

This area is designated as a potentially vulnerable area due to flood risk to Garelochhead, Helensburgh and Kilcreggan. There is flooding from coastal, river and surface water. Recent flooding occurred in December 2019 due to coastal and surface water flooding.

There are 3 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

Helensburgh (target area 26)
Kilcreggan (target area 67)
Garelochhead (target area 111)

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Local Flood Risk Management plan datasheet

Helensburgh (target area 26)

Summary

Helensburgh and Rhu are located on the east shore of Gare Loch and are found within the Argyll and Bute Council area. The main source of flooding in Helensburgh is coastal flooding, however there is also a risk from surface water flooding. The methodology for the national surface water flood maps is known to underestimate the risk in Helensburgh. There are approximately 270 people and 170 homes and businesses currently at risk of flooding. This is likely to increase to 740 people and 480 homes and businesses 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 improved for coastal flooding by the development of the Helensburgh Coastal Flood Protection Study (2019) which covered the areas of Helensburgh, Craigendoran and Rhu. The understanding of surface water flooding is improved by a sewer flood risk assessment. There is a long history of periodic coastal flooding in Helensburgh, including notable flooding

in January 2014 as a result of high tides, a storm surge and persistent rainfall. There are also records of surface water flooding including flooding in November 2006. 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	261	Avoid inappropriate development that increases flood risk in Helensburgh
Prepare for flooding	262	Prepare for current flood risk and future flooding as a result of climate change in Helensburgh
Reduce flood risk	263	Reduce the risk of coastal flooding in Helensburgh
Reduce flood risk	264	Reduce the risk of flooding from surface water and small watercourses in Helensburgh

Action ID	Helensburgh		2601
Action Type	Property flood resilience scheme		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	As part of the Helensburgh Flood Protection Scheme property flood resilience and resistance measures will be implemented.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.		

Action ID	Helensburgh	2602

Action Type	Shoreline management plan (coastal adaptive plan)		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Estimated delivery 2023/24
Description	Progress the development of the shoreline management plan for the Argyll and Bute coastline.		
Funding	Capital plus any available external funding		
Coordination	The action delivery lead is Argyll and Bute Council and coordination in coordination with SEPA.		

Action ID	Helensburgh		2603
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2023-2026
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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	Helensburgh		2604
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes		

	Helensburgh 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	Helensburgh		2605
Action Type	Surface water management plan		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Develop and implement a surface water management plan to reduce the risk of flooding from surface water and small watercourses in Helensburgh. The impacts of climate change on flood risk should be assessed. The results of the sewer flood risk assessment should be considered. Opportunities to disconnect surface water from the sewerage system should be identified. The surface water management plan should be reviewed and updated regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.		

Action ID	Helensburgh		2606
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde to inform ongoing flood warning. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.

Local Flood Risk Management plan datasheet
Kilcreggan (target area 67)

Summary	Location Map
Kilcreggan is located on the Rosneath Peninsula and is within the Argyll and Bute Council area. The main source of flooding in Kilcreggan is surface water flooding. The methodology for the national surface water flood maps is known to underestimate the risk in Kilcreggan. It estimates that there are approximately10 people and 9 homes and businesses currently at risk of flooding. This is likely to increase to 20 people and 10 homes and businesses by the 2080s due to climate change.	 © Crown copyright and database rights 2022 OS 100022379

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 development of the Kilcreggan Surface Water Management Plan (2019) and a sewer flood risk assessment. There are periodic records of surface water flooding in Kilcreggan which includes recent flooding in December 2019.

Objective	ID	Description
Avoid flood risk	671	Avoid inappropriate development that increases flood risk in Kilcreggan
Prepare for flooding	672	Prepare for current flood risk an future flooding as a result of climate change in Kilcreggan
Reduce flood risk	673	Reduce the risk of surface water flooding Kilcreggan

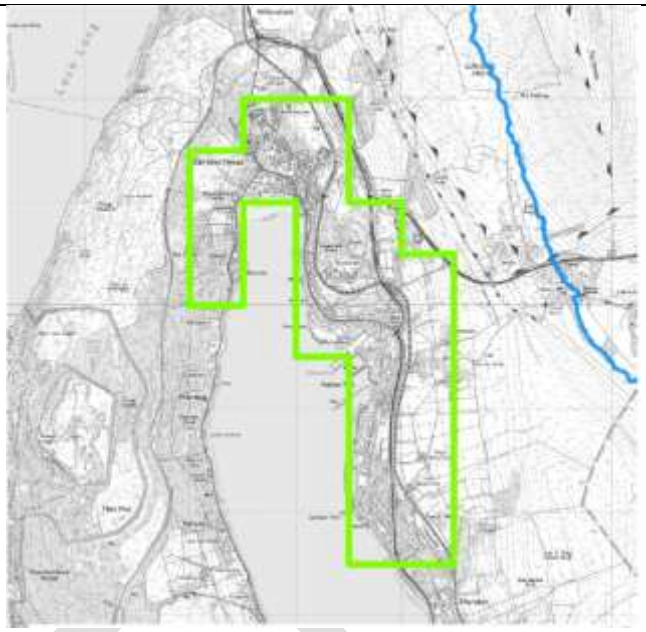
Action ID	Kilcreggan 6701
Action Type	Flood scheme or works implementation

Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Ongoing
Description	Progress the flood works based on the detailed design. The works involve refurbishment of an existing surface water channel and a new pipe network which discharges to a watercourse. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Capital/ Revenue plus any available external funding		
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water, SEPA and other actions in the area.		

Action ID	Kilcreggan		6702
Action Type	Surface water management plan		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Implement the surface water management plan. The plan should be reviewed and updated regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.		

Local Flood Risk Management plan datasheet
Garelochhead (target area 111)

Summary	Location Map

Garelochhead is located along the northern and eastern shores of Gare Loch in the Argyll and Bute Council area. The main source of flooding in Garelochhead is coastal flooding. There are approximately 110 people and 90 homes and businesses currently at risk of flooding. This is likely to increase to 130 people and 130 homes and businesses by the 2080s due to climate change.	 © Crown copyright and database rights 2022 OS 100022379

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 is a long history of coastal flooding recorded in Garelochhead. Notable flooding was recorded in January 2014 and November 2020 when the tidal section of the McAulay Burn flooded. 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	1111	Avoid inappropriate development that increases flood risk in Garelochhead

Improve data and understanding	1112	Improve data and understanding of the risk of coastal flooding in Garelochhead
Prepare for flooding	1113	Prepare for current flood risk and future flooding as a result of climate change in Garelochhead

Action ID	Garelochhead		11101
Action Type	Flood study		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	A flood study should be carried out to improve understanding of coastal flood risk in Garelochhead. The interactivity between coastal and other sources of flooding should be assessed. The impacts of climate change on flood risk should be evaluated. If flood risk is confirmed, scoping of the next steps should be completed. Data collection may also be included.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with SEPA and land / property owners.		

Action ID	Garelochhead		11102
Action Type	Shoreline management plan (coastal adaptive plan)		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Estimated delivery 2023/24
Description	Progress the development of the shoreline management plan for the Argyll and Bute coastline.		
Funding	Capital plus any available external funding		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with SEPA and land / property owners.		

Action ID	Garelochhead		11103
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2023-2026
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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2.3.2 PVA 02/11/02 (Loch Lomond and Vale of Leven)

This area is designated as a potentially vulnerable area due to flood risk to a number of communities. Some of these include Balloch, Bowling, Cardross, Dumbarton, Old Kilpatrick and communities within the Vale of Leven. There is flooding from river, coastal and surface water. There is a flood protection scheme on the Knowle Burn in Dunbarton. There is a long history of flooding, with recent floods being caused by coastal, river and surface water. There are 5 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

Vale of Leven (target area 2)
Bowling (target area 7)
Old Kilpatrick (target area 53)
Dumbarton (target area 61)
Cardross (target area 105)

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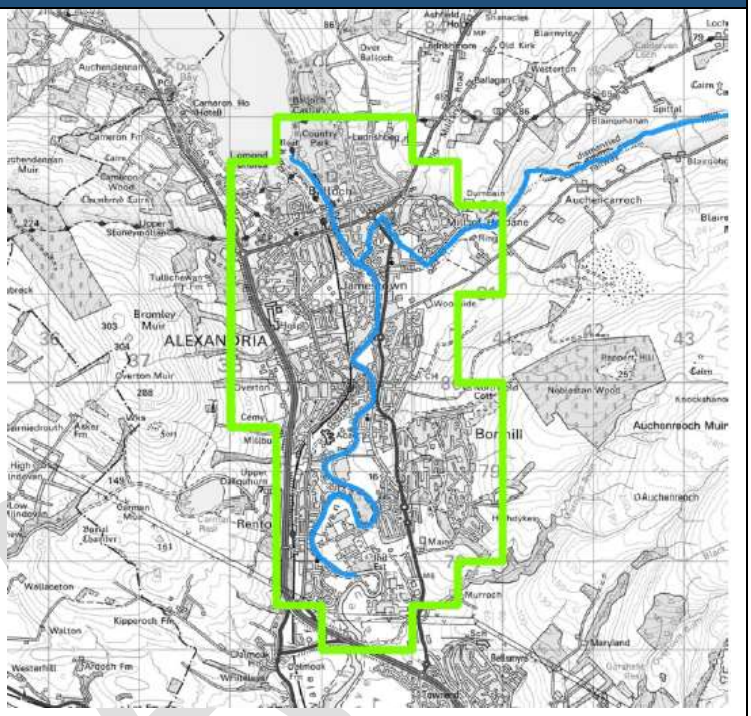
Local Flood Risk Management plan datasheet

Vale of Leven (target area 2)

Summary

The Vale of Leven is an area from the southern extent of Loch Lomond to north of Dumbarton and includes Balloch, Alexandria and Renton. The area is located within the West Dunbartonshire Council area. The main sources of flooding are river and surface water flooding, however there is also a risk of coastal flooding. There are approximately 3,300 people at risk from flooding and approximately 2,000 homes and businesses. This is likely to increase to 4,200 people and 2,500 homes and businesses 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 improved for river and coastal flood risk by the Loch Lomond and Vale of Leven Flood Risk Management Study

(2019), improved for river and surface water flood risk by an ongoing natural flood management study and for surface water flood risk by a sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	21	Avoid inappropriate development that increases flood risk in the Vale of Leven
Prepare for flooding	22	Prepare for current flood risk and future flooding as a result of climate change in the Vale of Leven
Reduce flood risk	23	Reduce the risk of flooding in the Vale of Leven

Action ID	Vale of Leven		201
Action Type	Flood scheme or works design		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council to develop the Vale of Leven Flood Protection Scheme based on the preferred options from the flood study. The preferred options consist of direct defences, relocation, improving conveyance and property level protection and resilience. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available. In accordance with the flood risk management plan, as part of the scheme or works, the responsible authority should aim to ensure the action will not have an adverse effect on the integrity of the Endrick Water Special Area of Conservation and the Inner Clyde Special Protection Area and Ramsar site.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.		

Action ID	Vale of Leven		202
Action Type	Community engagement		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Detailed design for the Vale of Leven Flood Protection Scheme should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Vale of Leven		203
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Ardoch 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Vale of Leven		204
Action Type	Surface water management plan		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council to develop a surface water management plan working with Scottish Water as appropriate, to gain an understanding of the hotspots of flooding and potential interaction with coastal and river flooding. The impacts of climate change on flood risk should be assessed. The plan should be reviewed and updated regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with Scottish Water.		

Action ID	Vale of Leven		205
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Loch Lomond and River Leven 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 West Dunbartonshire Council on the potential to use information on the flood scheme 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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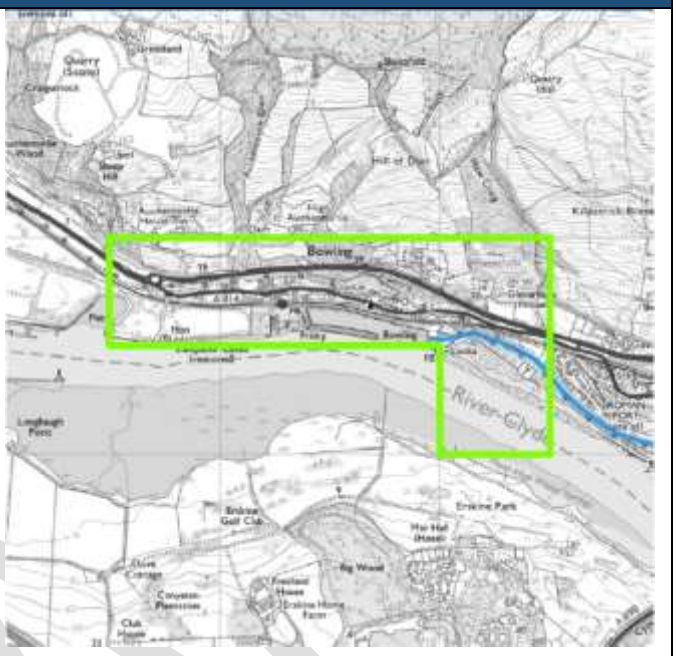
Local Flood Risk Management plan datasheet

Bowling (target area 7)

Summary

Bowling lies on the banks of the River Clyde and is located within the West Dunbartonshire Council area. The main source of flooding in the area is surface water flooding, however there is also a risk from coastal flooding. There are approximately 220 people at risk from flooding and approximately 110 homes and businesses, which is a significant proportion of the community. This is likely to increase to 280 people and 140 homes and businesses 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, and this information has highlighted the risk of flooding in this area. Bowling has therefore been identified as a new target area for the 2021 flood risk management plans. There are limited records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	71	Avoid inappropriate development that increases flood risk in Bowling
Improve data and understanding	72	Improve data and understanding of coastal and surface water flooding in Bowling

Action ID	Bowling		701
Action Type	Data collection		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Data collection and monitoring may be required to improve the confidence in flood sources, mechanisms and risk.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.		

Action ID	Bowling		702
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.

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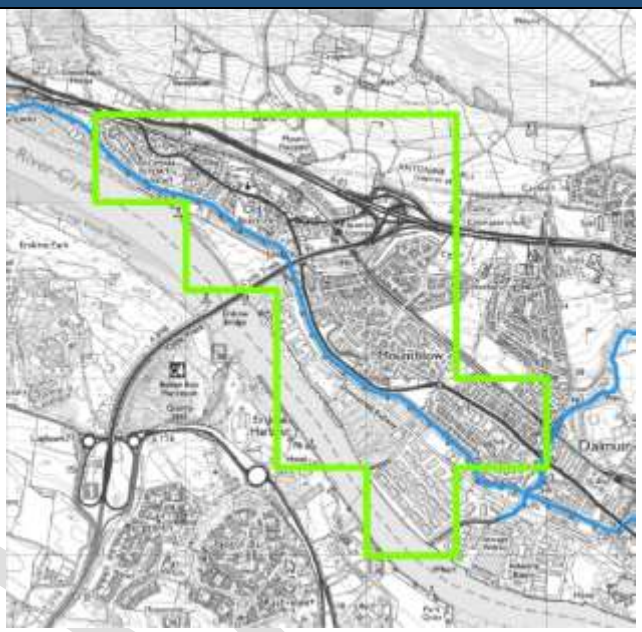
Local Flood Risk Management plan datasheet

Old Kilpatrick (target area 53)

Summary

Old Kilpatrick is located north-west of Glasgow on the River Clyde. The area is within West Dunbartonshire Council area. The main source of flooding in Old Kilpatrick is surface water flooding, however there is also a risk of coastal flooding. There are approximately 990 people at risk from flooding and approximately 530 homes and businesses. This is estimated to increase to 1,200 people and 640 homes and businesses 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 improved for surface water flood risk by a sewer flood risk assessment. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	531	Avoid inappropriate development that increases flood risk in this target area
Improve data and understanding	532	Improve data and understanding of coastal flooding in this target area
Prepare for flooding	533	Prepare for future flooding and future flood risk as a result of climate change in this target area
Reduce flood risk	534	Reduce the risk of surface water flooding in this target area

Action ID	Old Kilpatrick		5301
Action Type	Data collection		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council to start data collection to improve understanding of coastal flood risk. A review may be required to assess the need for tidal gauges. Post flood event surveys may be required to collect data on flooding mechanisms, risk and damage caused.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.		

Action ID	Old Kilpatrick		5302
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the		

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	impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.
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	Old Kilpatrick		5303
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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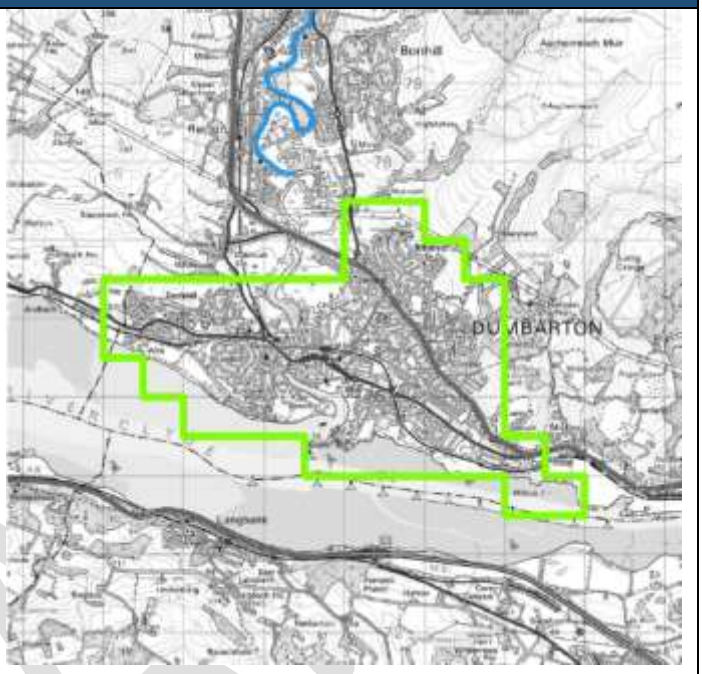
Local Flood Risk Management plan datasheet

Dumbarton (target area 61)

Summary

Dumbarton is located on the north bank of the River Clyde and is within West Dunbartonshire local authority area. The main source of flooding in Dumbarton is river and coastal flooding however, there is also risk from surface water flooding. There are approximately 5,200 people at risk from flooding and approximately 3,100 homes and businesses. This is estimated to increase to 6,200 people and 3,600 homes and businesses 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 improved for river and coastal flood risk by the Loch Lomond and Vale of Leven Flood Risk Management Study (2019) and improved for surface water flood risk by a sewer flood risk assessment. Understanding is also improved for river and coastal flooding by the flood warning schemes. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	611	Avoid an increase in flood risk by the appropriate management and maintenance of Knowle Burn Flood Protection Scheme 2007
Avoid flood risk	612	Avoid inappropriate development that increases flood risk in Dumbarton
Prepare for flooding	613	Prepare for current flood risk and future flooding as a result of climate change in Dumbarton
Reduce flood risk	614	Reduce the risk of flooding in Dumbarton

Action ID	Dumbarton		6101
Action Type	Flood scheme or works design		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council to develop the Dumbarton (Vale of Leven) Flood Protection Scheme based on the preferred option from The Loch Lomond and Vale of Leven Flood Risk Management Study (2019). The preferred option in Dumbarton consists of direct defences and property level protection and resilience. Relocation is also to be considered. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available. In accordance with the flood risk management plan, as part of the scheme or works, the responsible authority should aim to ensure the action will not have an adverse effect on the integrity of the Endrick Water Special Area of Conservation and the Inner Clyde Special Protection Area and Ramsar Site.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.		

Action ID	Dumbarton		6102
Action Type	Community engagement		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Detailed design for the Dumbarton (Vale of Leven) Flood Protection Scheme should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Dumbarton		6103
Action Type	Flood scheme or works design		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council to continue developing the Gruggies Burn Flood Protection Scheme. An adaptation plan should be developed as part of the detailed design. The preferred option is to maximise upstream flood storage and construct defences from Hunter's Burn to Castle Street, and downstream of Castlegreen Street to address coastal flooding. Property level protection within the scheme will also be considered.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.		

Action ID	Dumbarton		6104
Action Type	Flood scheme or works implementation		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council have procured a contractor to appraise the optional designs for the Gruggies Burn Flood Protection Scheme.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.		

Action ID	Dumbarton		6105
Action Type	Community engagement		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Detailed design for the Gruggies Burn Flood Protection Scheme should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Dumbarton		6106
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council to develop an adaptation plan for the Knowles Burn Flood Protection Scheme (2007), following on the outputs from the Vale of Leven flood study on the present performance of the Knowles Burn Flood Protection Scheme (2007).		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.		

Action ID	Dumbarton		6107
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Ardoch 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Dumbarton	6108
Action Type	Surface water management plan	

Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	West Dunbartonshire Council to develop a surface water management plan working with Scottish Water as appropriate, to gain an understanding of the hotspots of flooding and potential interaction with coastal and river flooding. The impacts of climate change on flood risk should be assessed. The plan should be reviewed and updated regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with Scottish Water.		

Action ID	Dumbarton		6109
Action Type	Flood defence maintenance		
Action Delivery Lead	West Dunbartonshire Council	Indicative Delivery	Ongoing
Description	Maintenance of the Knowles Burn Flood Protection Scheme (2007)		
Funding	Revenue funding		
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Dumbarton		6110
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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	Dumbarton		6111
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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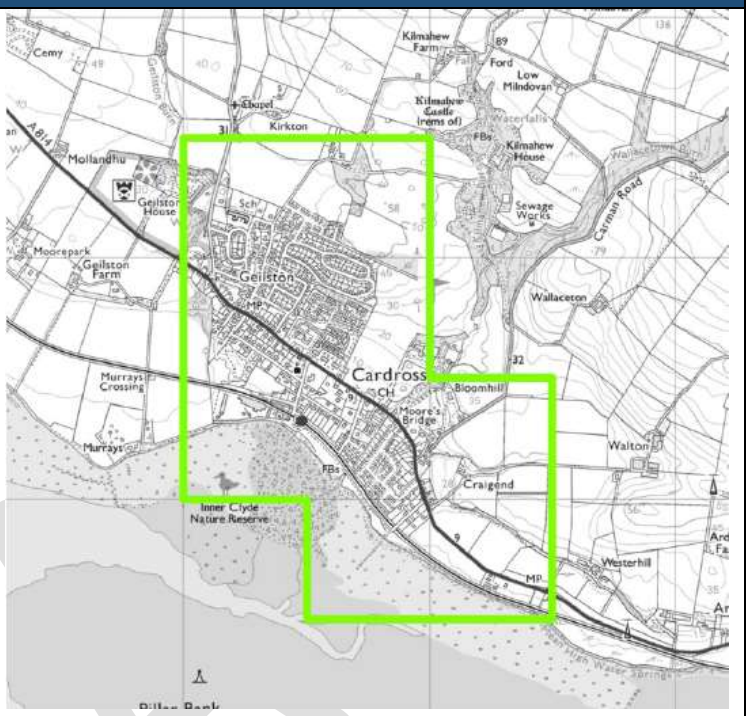
Local Flood Risk Management plan datasheet

Cardross (target area 105)

Summary

The village of Cardross lies on the north side of the Firth of Clyde within the Argyll and Bute Council area. The main source of flooding is surface water, however there are also risk of river and coastal flooding. There are approximately 330 people and 180 homes and businesses at risk from flooding. This is likely to increase to 420 people and 230 homes and businesses 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, and this national assessment has highlighted the risk of flooding in this target area. There are frequent records of surface water flooding in Cardross with flooding of the A814 and around Cedarwood Court particularly frequent. There are also records of coastal and river flooding.

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	1051	Avoid inappropriate development that increases flood risk in Cardross
Improve data and understanding	1052	Improve data and understanding of the risk of coastal, river and surface water flooding in Cardross
Prepare for flooding	1053	Prepare for current flood risk and future flooding as a result of climate change in Cardross

Action ID	Cardross		10501
Action Type	Flood study		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	A flood study should be carried out to improve understanding of coastal, river and surface water flood risk in Cardross. The interactivity between sources of flooding should be assessed. The impacts of climate change on flood risk should be evaluated. If flood risk is confirmed, scoping of the next steps should be completed. Data collection may also be included. Argyll and Bute Council to consider installing rain and river monitors on Kilmahew Burn.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with SEPA, Scottish Water, Community Council and landowners.		

Action ID	Cardross	10502

Action Type	Shoreline management plan (coastal adaptive plan)		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Estimated delivery 2023/24
Description	Progress the development of the shoreline management plan for the Argyll and Bute coastline.		
Funding	Capital plus any available external funding		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with SEPA, Network Rail and landowners.		

Action ID	Cardross		10503
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2023-2026
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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	Cardross		10504
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes		

	Ardoch 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.

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2.3.3 PVA 02/11/03 (Yoker catchment - Clydebank to Partick)

This area is designated as a potentially vulnerable area due to the flood risk to a number of communities. Some of these include Clydebank, Glasgow west end, Yoker and Drumchapel districts of Glasgow. There is flooding from river, coastal and surface water. Recent floods have been caused by surface water flooding.

There are 5 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

Glasgow west end (target area 50)
Yoker (target area 51)
Drumchapel (target area 52)
Clydebank (target area 54)
Duntocher and Hardgate (target area 62)

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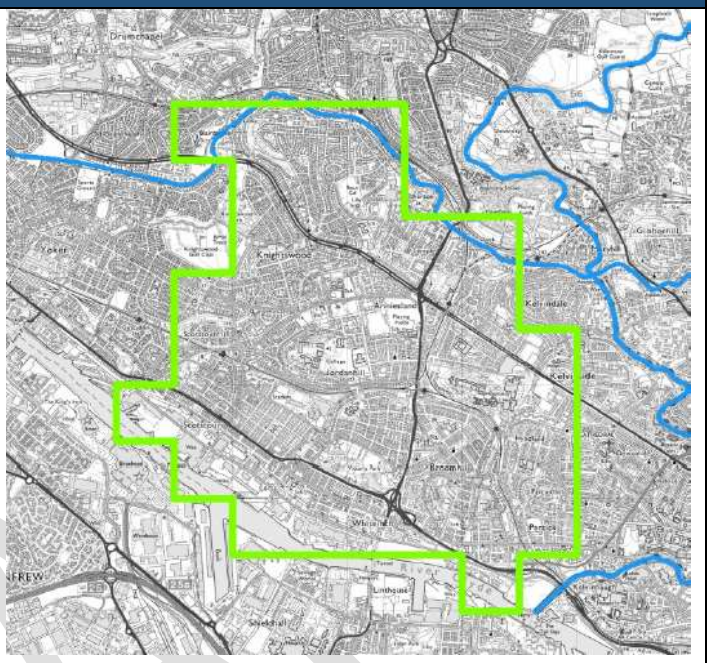
Local Flood Risk Management plan datasheet

Glasgow west end (target area 50)

Summary

Glasgow West End is primarily within the Glasgow City Council area. The main source of flooding in Glasgow West End is coastal flooding (tidal Clyde), however there are also risks from river and surface water. There are approximately 9,800 people at risk of flooding and approximately 5,100 homes and businesses. This is likely to increase to 12,000 people and 6,100 homes and businesses 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 improved for coastal flooding by the tidal Clyde model update (2020) and surface water flooding by the surface water management plan (High Knightswood area) and sewer flood risk assessment. There are recent records of surface water flooding in this target area, notably in August 2021 when intense rainfall resulted in surface water flooding.

Objective	ID	Description
Avoid flood risk	501	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	502	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures
Prepare for flooding	503	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	504	Reduce the risk of flooding in this target area

Action ID	Glasgow west end		5001
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Review surface water management measures identified for High Knightswood and develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Glasgow west end		5002
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire Council and SEPA.

Action ID	Glasgow west end		5003
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Glasgow west end		5004
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to develop a surface water management plan in Scotstoun, Jordanhill and Whiteinch areas. The outputs of this plan will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

Action ID	Glasgow west end		5005
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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	Glasgow west end		5006
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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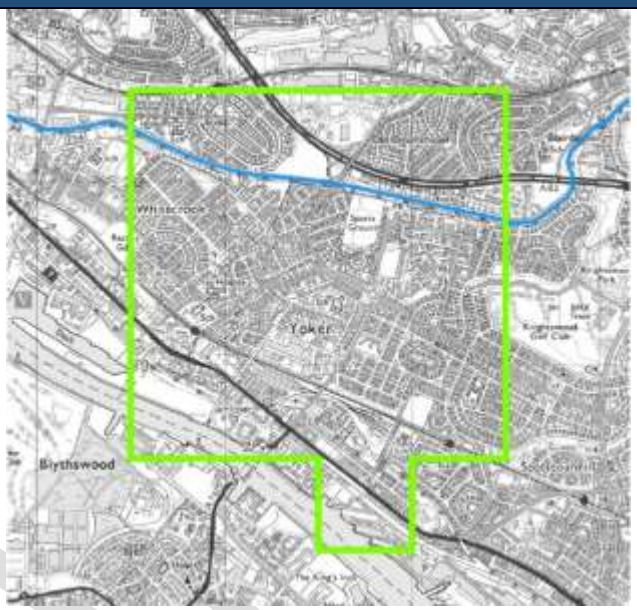
Local Flood Risk Management plan datasheet

Yoker (target area 51)

Summary

Yoker covers a district of Glasgow 7km west of the city centre. The area is located within the Glasgow City and West Dunbartonshire Council areas. The main sources of flooding in Yoker are river and surface water flooding, however there is also a risk from coastal flooding. There are approximately 5,300 people and 2,700 homes and businesses currently at risk of flooding. This is likely to increase to 6,500 people and 3,300 homes and businesses 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 improved for river by the Yoker natural flood management study (2017) and for surface water by the surface water management plan (Yokermain area) and sewer flood risk assessment. There is also improved understanding for coastal flooding by the tidal Clyde model update (2020). There are recent records of surface water flooding in this target area, notably in August 2021 when intense rainfall resulted in surface water flooding.

Objective	ID	Description
Avoid flood risk	511	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	512	Avoid an increase in flood risk by the appropriate management and maintenance of the Yoker Burn Flood Protection Scheme and other flood defences in this target area
Prepare for flooding	513	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	514	Reduce the risk of flooding in this target area

Action ID	Yoker		5101
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detail design for the surface water management plan/natural flood management preferred option from the study to be developed. Preferred option includes instream structures, offline storage ponds, riparian catchment woodland creation, overland sediment traps, non-floodplain wetlands, and floodplain restoration with floodplain planting. The outputs of the surface water catchment plan on the performance of the Yoker Burn Flood Protection Scheme should be included in the adaptation plan for this area. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.		

Action ID	Yoker	5102
Action Type	Community engagement	

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Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A Community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Yoker		5103
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire Council and SEPA.		

Action ID	Yoker		5104
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026

Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Yoker		5105
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the Yoker Burn Flood Protection Scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Yoker		5106
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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	Yoker		5107
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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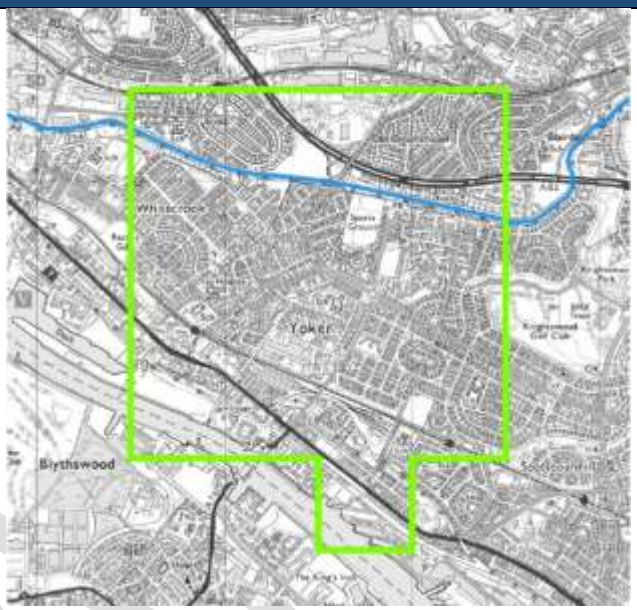
Local Flood Risk Management plan datasheet

Drumchapel (target area 52)

Summary

Drumchapel is in north western Glasgow and located within the East Dunbartonshire and Glasgow City Council areas. The main source of flooding in Drumchapel is surface water flooding, however there is also a risk of river flooding. There are approximately 3,200 people and 1,700 homes and businesses currently at risk of flooding. This is likely to increase to 3,510 people and 1,800 homes and businesses 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 improved for surface water and river by the natural flood management study, surface water management plan and sewer flood risk assessment. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	521	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	522	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures
Prepare for flooding	523	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	524	Reduce the risk of flooding in this target area

Action ID	Drumchapel		5201
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to complete the Drumchapel surface water management preferred option detail design for Phase 2 of the works. The detail design outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with East Dunbartonshire Council, Scottish Water and SEPA.		

Action ID	Drumchapel		5202
Action Type	Community engagement		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A		

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	Community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

Action ID	Drumchapel		5203
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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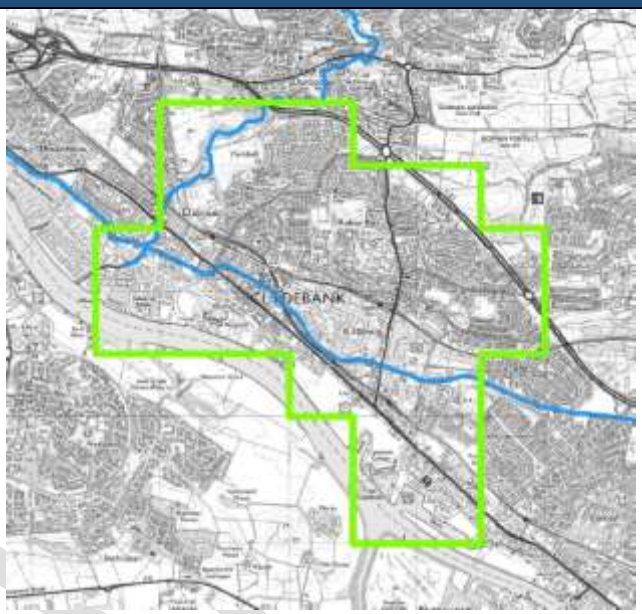
Local Flood Risk Management plan datasheet

Clydebank (target area 54)

Summary

Clydebank is located on the River Clyde within the West Dunbartonshire local authority area. Small parts are covered by Renfrewshire and Glasgow City Councils. The main source of flooding in Clydebank is surface water flooding, however there is also a river and coastal flood risk from the tidally influenced River Clyde. There are approximately 1,800 people at risk from flooding and approximately 1,200 homes and businesses. This is estimated to increase to 2,700 people and 1,700 homes and businesses by 2080 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 improved for surface water flood risk by a sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	541	Avoid inappropriate development that increases flood risk in this target area
Improve data and understanding	542	Improve data and understanding of surface water flooding in this target area
Prepare for flooding	543	Prepare for current flood risk and future flooding as a result of climate change in this target area

Action ID	Clydebank		5401
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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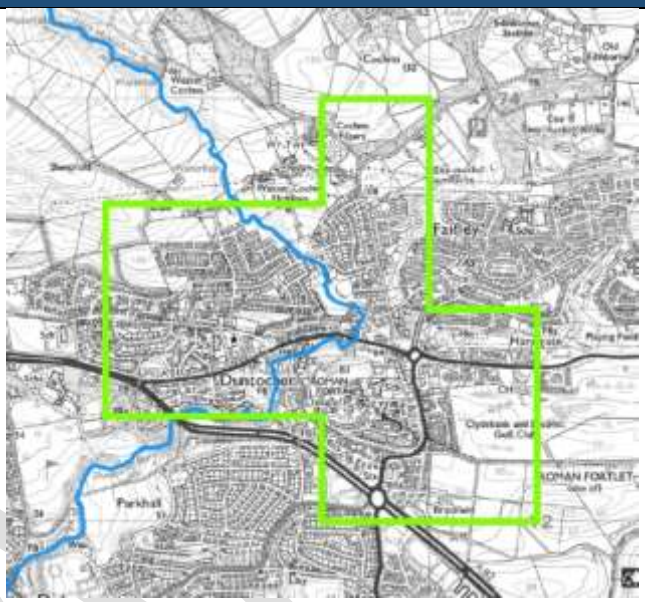
Local Flood Risk Management plan datasheet

Duntocher and Hardgate (target area 62)

Summary

Duntocher and Hardgate are 2 villages located west of Glasgow, within West Dunbartonshire local authority area. The main source of flooding in Duntocher and Hardgate is surface water flooding, however there is also a risk of river flooding. There are approximately 310 people and 170 homes and businesses currently at risk from flooding. This is likely to increase to 360 people and 210 homes and businesses 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 improved for surface water flood risk by a sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	621	Avoid inappropriate development that increases flood risk in this target area
Improve data and understanding	622	Improve data and understanding of surface water flooding in this target area
Prepare for flooding	623	Prepare for current flood risk and future flooding as a result of climate change in this target area

Action ID	Duntocher and Hardgate		6201
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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2.3.4 PVA 02/11/04 (River Kelvin)

This area is designated as a potentially vulnerable area due to flood risk to a number of communities. Some of these include Bearsden, Bishopbriggs, Milngavie, Torrance and Balmore. The main sources of flooding are from river and surface water. There is a long history of flooding in the area, with recent floods being caused by surface water and by river flooding.

There are 12 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.

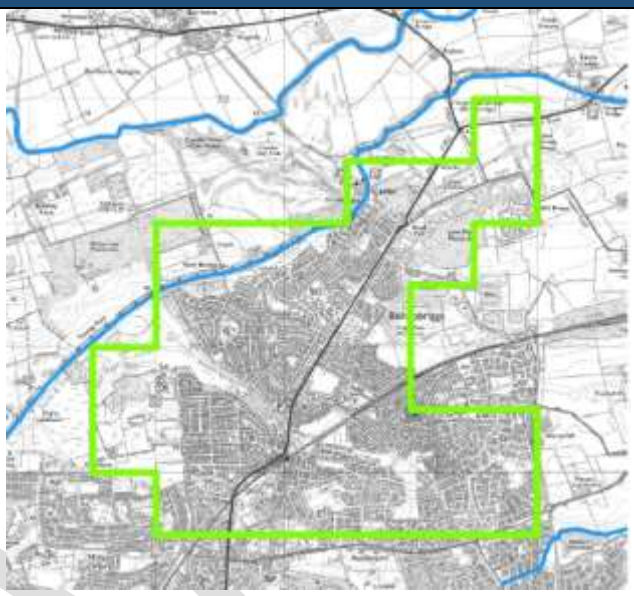
List of target areas

Bishopbriggs west (target area 4)
Kelvinside (target area 46)
Kilsyth (target area 79)
Milngavie (target area 84)
Queenzieburn (target area 91)
Lennoxtown (target area 98)
Bearsden (target area 103)
Kirkintilloch North (target area 157)
Possil Park (target area 158)
Milton (target area 159)
Summerston (target area 160)
Torrance and Balmore (target area 81001)

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Local Flood Risk Management plan datasheet

Bishopbriggs west (target area 4)

Summary	Location Map
Bishopbriggs west is a suburb of Glasgow. The area is located within East Dunbartonshire and Glasgow City Council areas. There is a risk of surface water and river flooding in the Bishopbriggs West area. There are approximately 1,200 people at risk from flooding and approximately 720 homes and businesses. This is likely to increase to 1,500 people and 900 homes and businesses by the 2080s due to climate change.	 © Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and surface water management plan (2019). There are periodic records of flooding in this target area, most notably in June 2018 when intense summer rainfall brought localised flooding in Bishopbriggs.

Objective	ID	Description
Avoid flood risk	41	Avoid inappropriate development that increases flood risk in Bishopbriggs
Prepare for flooding	42	Prepare for current flood risk and future flooding as a result of climate change in Bishopbriggs
Reduce flood risk	43	Reduce the risk of flooding in Bishopbriggs

Action ID	Bishopbriggs west		401
Action Type	Flood scheme or works design		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to develop the works identified in the Bishopbriggs (west) surface water management plan to detailed design. The preferred option is comprised of a combination of underground storage, property flood protection, sustainable urban drainage systems retrofit, swales, bunds, and roof disconnection. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.		

Action ID	Bishopbriggs west		402
Action Type	Flood scheme or works implementation		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to develop the works identified in the Bishopbriggs (west) surface water management plan detailed design. The preferred option is comprised of a combination of underground storage, property flood protection, sustainable urban drainage systems retrofit, swales, bunds, and roof disconnection.		

	The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

Action ID	Bishopbriggs west		403
Action Type	Community engagement		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Bishopbriggs west		404
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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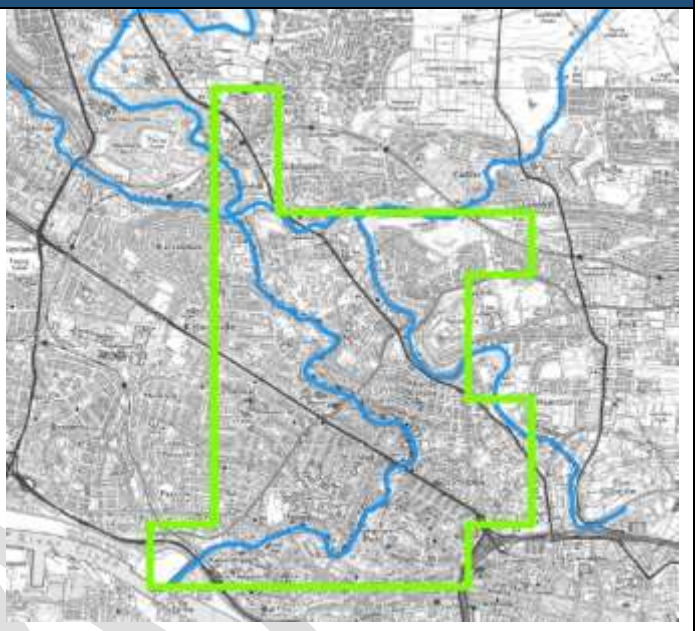
Local Flood Risk Management plan datasheet

Kelvinside (target area 46)

Summary

Kelvinside is a residential area of north-west Glasgow, including a section of the River Kelvin. The area is located within the Glasgow City Council area. The main source of flooding in Kelvinside is from surface water flooding, however there is also a risk from river flooding. There are approximately 6,700 people and 4,300 homes and businesses currently at risk of flooding. This is likely to increase to 8,800 people and 5,400 homes and businesses 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 improved for river flooding by the River Kelvin flood study (2015). There is a long record of flooding in this target area, most notably in December 2015 due to Storm Desmond.

Objective	ID	Description
Avoid flood risk	461	Avoid inappropriate development that increases flood risk in Bishopbriggs
Prepare for flooding	462	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	463	Reduce the risk of flooding in this target area

Action ID	Kelvinside		4601
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire Council and SEPA.		

Action ID	Kelvinside		4602
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	In coordination with East Dunbartonshire, Glasgow City Council to complete the natural flood management study for their sections of the River Kelvin and tributaries. The study outputs will be used to develop a programme to take forward key recommendations where funding permits.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Dunbartonshire Council.

Action ID	Kelvinside		4603
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Kelvinside		4604
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Kelvinside		4605
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the River Kelvin flood warning scheme. The scheme should be investigated for improvement and/or recalibration		
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 coordinate flood warning development with the flood studies work. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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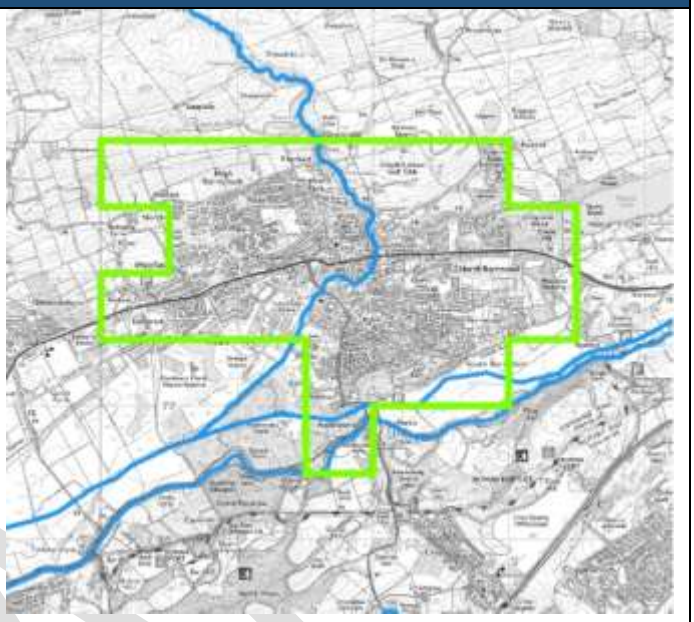
Local Flood Risk Management plan datasheet

Kilsyth (target area 79)

Summary

Kilsyth is located halfway between Glasgow and Stirling, within the North Lanarkshire local authority area. The main source of flooding in the Kilsyth is surface water flooding, however, there is also a risk from river flooding. There are approximately 720 people and 410 homes and businesses currently at risk from flooding. This is likely to increase to 840 people and 470 homes and businesses 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 improved for river flood risk by the Kilsyth Flood Risk Assessment (2011) and Kilsyth Flood Mitigation report (2012). There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	791	Avoid inappropriate development that increases flood risk in Kilsyth
Prepare for flooding	792	Prepare for current flood risk and future flooding as a result of climate change in Kilsyth
Reduce flood risk	793	Reduce the risk of flooding in Kilsyth

Action ID	Kilsyth		7901
Action Type	Flood scheme or works design		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to develop detailed design for Kilsyth Flood Protection Scheme based on the preferred option from the flood study. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Canals.		

Action ID	Kilsyth		7902
Action Type	Community engagement		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to carry out community engagement linked to any proposed Kilsyth Flood Protection Scheme. A community engagement plan will be created when the list of options are fully reviewed.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

Action ID	Kilsyth		7903
Action Type	Flood study		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	A more detailed flood modelling should be carried out to further investigate the interaction between surface water and river sources.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Kilsyth		7904
Action Type	Flood study (options appraisal)		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Kilsyth	7905

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Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Kilsyth		7906
Action Type	Surface water management plan		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to complete the development of the plan and review feasible options in collaboration with Scottish Canals.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water, SEPA and Scottish Canals.		

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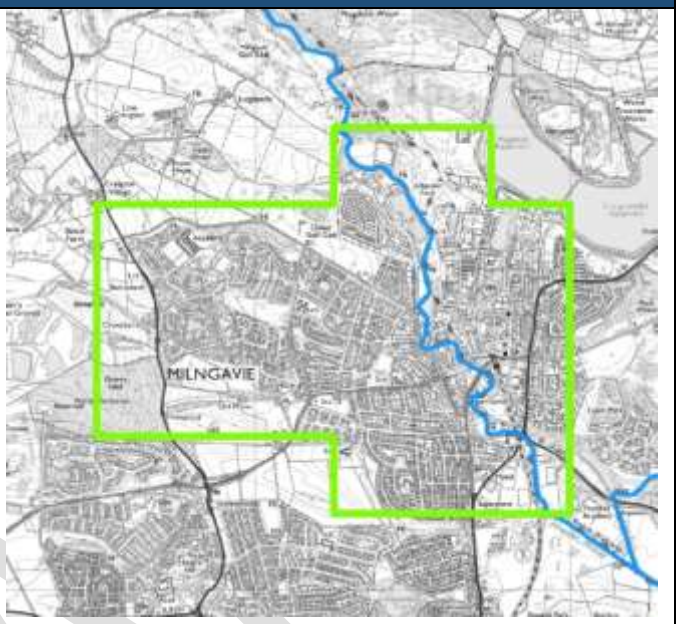
Local Flood Risk Management plan datasheet

Milngavie (target area 84)

Summary

Milngavie lies 10km north-east of Glasgow, on the Allander Water and is located within the East Dunbartonshire Council area. The main source of flooding in Milngavie is river flooding, however there is also a risk from surface water flooding. There are approximately 1,000 people and 550 homes and businesses currently at risk from flooding. This is likely to increase to 1,100 people and 610 homes and businesses 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 improved for surface water flooding by the sewer flood risk assessment and surface water management plan (2019) and for river flooding by the River Kelvin and tributaries study which included the Allander Water. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	841	Avoid inappropriate development that increases flood risk in Milngavie
Prepare for flooding	842	Prepare for current flood risk and future flooding as a result of climate change in Milngavie
Reduce flood risk	843	Reduce the risk of flooding in Milngavie

Action ID	Milngavie		8401
Action Type	Flood study (options appraisal)		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	The local authority to continue implementation of the surface water management plan, working with Scottish Water as appropriate.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.		

Action ID	Milngavie		8402
Action Type	Flood scheme or works design		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to develop the works identified in the Milngavie Surface Water Management Plan to detailed design. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

Action ID	Milngavie		8403
Action Type	Flood scheme or works implementation		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to take forward construction of the surface water management detailed designs. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water and SEPA.		

Action ID	Milngavie		8404
Action Type	Community engagement		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Milngavie		8405
Action Type	Flood study (options appraisal)		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Following on the outputs of the River Kelvin and tributaries feasibility study, East Dunbartonshire Council to develop an options appraisal to managed flood risk in the Allander Water catchment.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.		

Action ID	Milngavie		8406
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

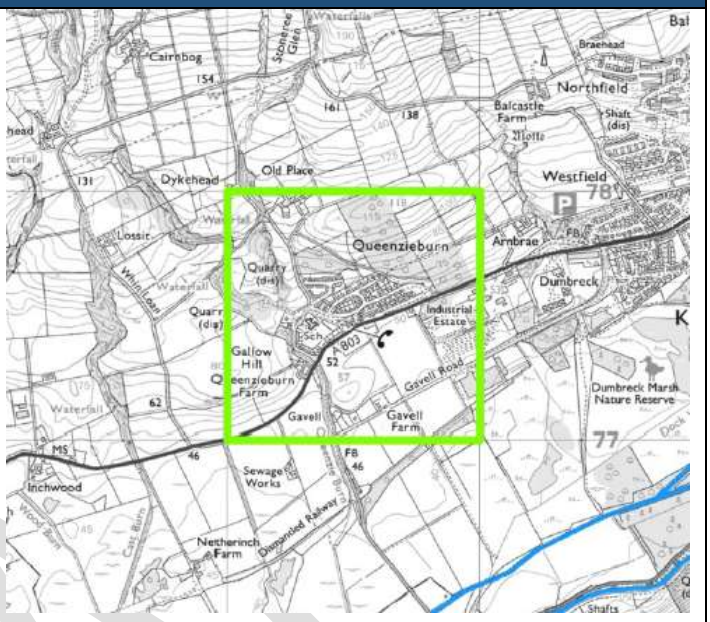
Local Flood Risk Management plan datasheet

Queenzieburn (target area 91)

Summary

The small settlement of Queenzieburn is located within the North Lanarkshire local authority area. The main sources of flooding in Queenzieburn are surface water and river flooding. There are approximately 80 people and 50 homes and businesses currently at risk of flooding. The number of people is likely to remain the same and homes and businesses to increase to 60 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 improved for surface water flood risk by a sewer flood risk assessment. Together, this information has highlighted the risk of flooding in this area. Queenzieburn has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	911	Avoid inappropriate development that increases flood risk in Queenzieburn
Prepare for flooding	912	Prepare for current flood risk and future flooding as a result of climate change in Queenzieburn
Reduce flood risk	913	Reduce the risk of flooding in Queenzieburn

Action ID	Queenzieburn		9101
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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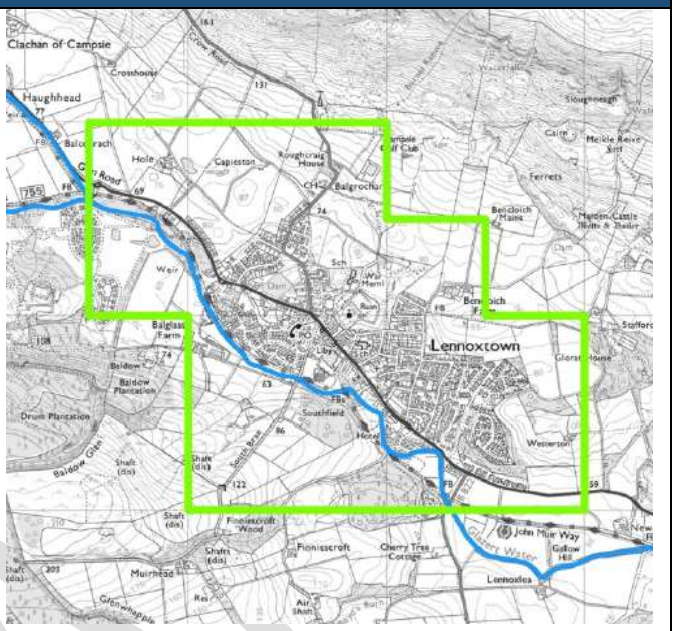
Local Flood Risk Management plan datasheet

Lennoxtown (target area 98)

Summary

Lennoxtown is a town located within the East Dunbartonshire Council area. The main source of flooding in Lennoxtown is surface water, however there is also risk of river flooding. There are approximately 690 people and 330 properties currently at risk from flooding. This is likely to increase to 880 people and 410 properties 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 improved for river flooding by the natural flood management study carried out for the Glazert catchment (2016). There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	981	Avoid inappropriate development that increases flood risk in Lennoxtown
Avoid flood risk	982	Avoid an increase in flood risk by the appropriate management and maintenance of the Lennoxtown 1963 and Glazertbank Flood Protection Scheme 2000
Prepare for flooding	983	Prepare for current flood risk and future flooding as a result of climate change in Lennoxtown
Reduce flood risk	984	Reduce the risk of flooding in Lennoxtown

Action ID	Lennoxtown		9801
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	The study of the Lennonxtown Flood Protection Schemes should establish the predicted standard of protection for a number of climate change scenarios. This information will underpin the development of an adaptation plan for the long term protection of the community.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.		

Action ID	Lennoxtown		9802
Action Type	Flood defence maintenance		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	Ongoing

Description	Maintenance to the Lennoxtown Flood Protection Schemes should continue and updates to the maintenance regime be made based on the findings of the flood study.
Funding	Revenue funding
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

Action ID	Lennoxtown		9803
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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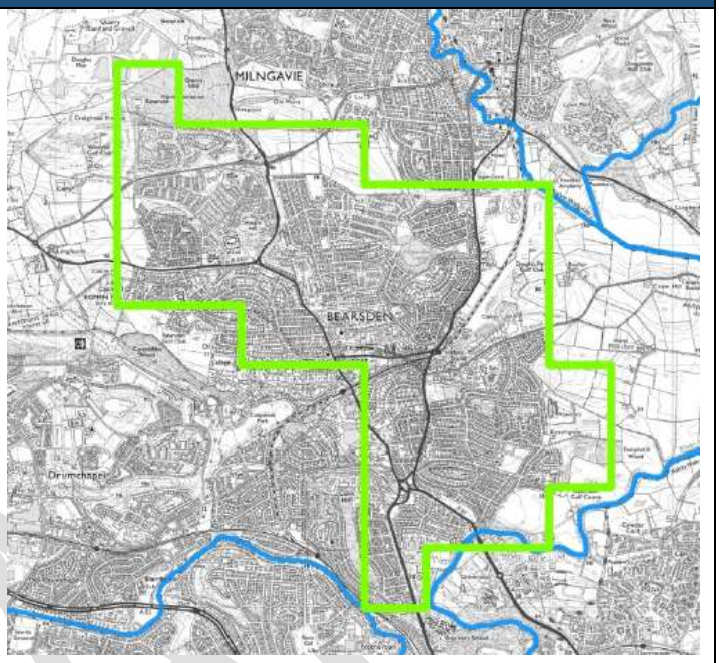
Local Flood Risk Management plan datasheet

Bearsden (target area 103)

Summary

Bearsden is located 10km from Glasgow city centre. It is located within the Glasgow City and East Dunbartonshire Council areas. The main source of flooding in Bearsden is surface water flooding. There is also a risk from river flooding. There are approximately 1,400 people and 690 homes and businesses currently at risk from flooding. This is expected to increase to 1,600 people and 810 homes and businesses 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 improved for surface water flooding by the sewer flood risk assessment and surface water management plan (2019). Understanding is improved for river flooding by the Manse Burn Flood Risk Assessment (2014) and the flood studies that have supported the development of the flood protection schemes in the target area. There is a long record of flooding in the target area.

Objective	ID	Description
Avoid flood risk	1031	Avoid inappropriate development that increases flood risk in Bearsden
Avoid flood risk	1032	Avoid an increase in flood risk by the appropriate management and maintenance of the Heather Avenue Flood Protection Scheme 2018
Prepare for flooding	1033	Prepare for current flood risk and future flooding as a result of climate change in Bearsden
Reduce flood risk	1034	Reduce the risk of flooding in Bearsden

Action ID	Bearsden		10301
Action Type	Flood scheme or works design		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to develop the works identified in the Bearsden Surface Water Management Plan to detailed design. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.		

Action ID	Bearsden		10302
Action Type	Flood scheme or works implementation		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to take forward construction of the detailed designs identified in the Bearsden Surface Water Management Plan.		

	The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water and SEPA.

Action ID	Bearsden		10303
Action Type	Community engagement		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A Community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Bearsden		10304
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Bearsden		10305
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Study of the Heather Avenue Flood Protection Scheme (2018).		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.		

Action ID	Bearsden		10306
Action Type	Flood defence maintenance		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Heather Avenue Flood Protection Scheme (2018), Golf View Flood Protection Scheme (2021) and Colquhoun park Flood Protection Scheme (2014) should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

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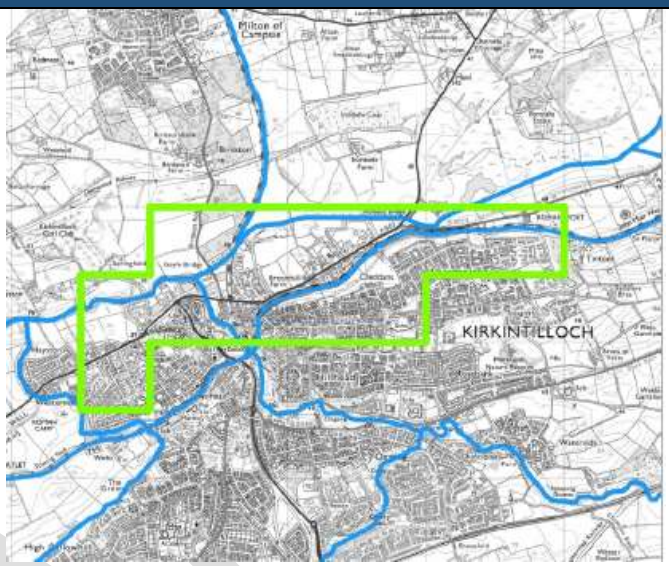
Local Flood Risk Management plan datasheet

Kirkintilloch north (target area 157)

Summary

The Kirkintilloch North area covers the northern part of the town of Kirkintilloch and a section of the A807. It is within the East Dunbartonshire Council area. The main source of flooding in Kirkintilloch North is river flooding, however there is also a risk of surface water flooding. There are approximately 960 people and 550 homes and businesses currently at risk from flooding. This is likely to increase to 1,100 people and 740 homes and businesses 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 improved for surface water flooding by the sewer flood risk assessment and for river flooding by the River Kelvin and tributaries study. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1571	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	1572	Avoid an increase in flood risk by the appropriate management and maintenance of the River Kelvin Flood Protection Scheme 1998
Prepare for flooding	1573	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1574	Reduce the risk of flooding in this target area

Action ID	Kirkintilloch north		15701
Action Type	Flood study		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	In coordination with Glasgow City Council and SEPA, East Dunbartonshire to complete the natural flood management study for their sections of the River Kelvin and tributaries. The findings from the river restoration feasibility studies carried out by the local authority for Park Burn, Allander Water and Luggie Water should be used if required.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.		

Action ID	Kirkintilloch north		15702
Action Type	Flood study		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to undertake joint working with North Lanarkshire Council to understand flood risk from the Luggie		

	Water. If flood risk is confirmed in the target area a scoping study should be carried out to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with North Lanarkshire Council and SEPA.

Action ID	Kirkintilloch north		15703
Action Type	Flood defence maintenance		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the River Kelvin Flood Protection Scheme 1998 should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Kirkintilloch north		15704
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the River Kelvin flood warning scheme. The scheme should be investigated for improvement and/or recalibration		
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 coordinate flood warning development with the flood studies work. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.

Action ID	Kirkintilloch north		15705
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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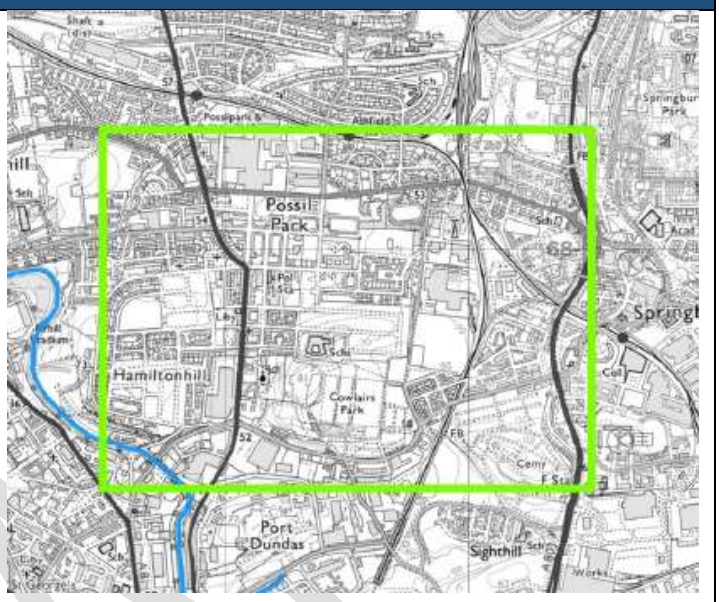
Local Flood Risk Management plan datasheet

Possil Park (target area 158)

Summary

Possil Park is located north of the River Clyde within the Glasgow City Council area. The only source of flooding in Possil Park is surface water. There are approximately 1,100 people and 610 homes and businesses currently at risk of flooding. This is likely to increase to 1,400 people and 750 homes and businesses 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 improved for surface water by the sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	1581	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1582	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1583	Reduce the risk of flooding in this target area

Action ID	Possil Park		15801
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock and Dalmuir sewer catchments 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Possil Park		15802
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water, SEPA and Scottish Canals.

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Local Flood Risk Management plan datasheet

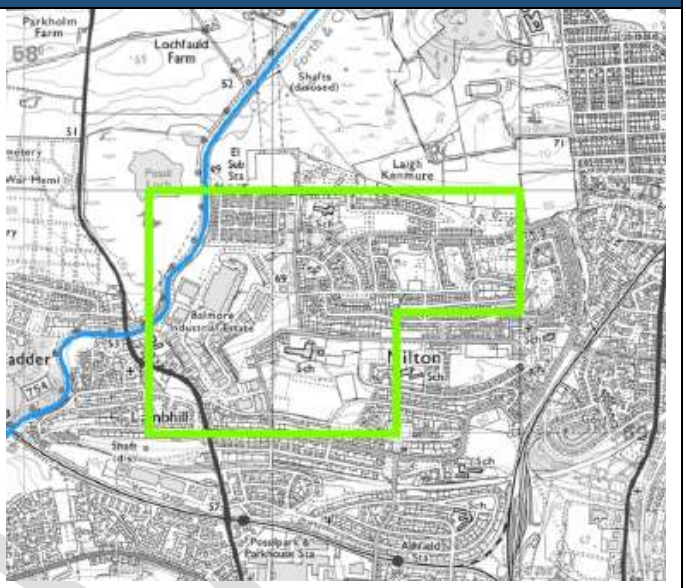
Milton (target area 159)

Summary

Milton is located within the northern district of Glasgow approximately 6km from Glasgow City Centre. Milton is situated within the Glasgow City Council area. The only source of flooding in Milton is surface water.

There are approximately 120 people and 70 homes and businesses currently at risk of flooding. This is likely to increase to 140 people and 80 homes and businesses 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 improved for surface water by the sewer flood risk assessment. Localised flooding was experienced due to heavy rain during June 2018.

Objective	ID	Description
Avoid flood risk	1591	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1592	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1593	Reduce the risk of flooding in this target area

Action ID	Milton		15901
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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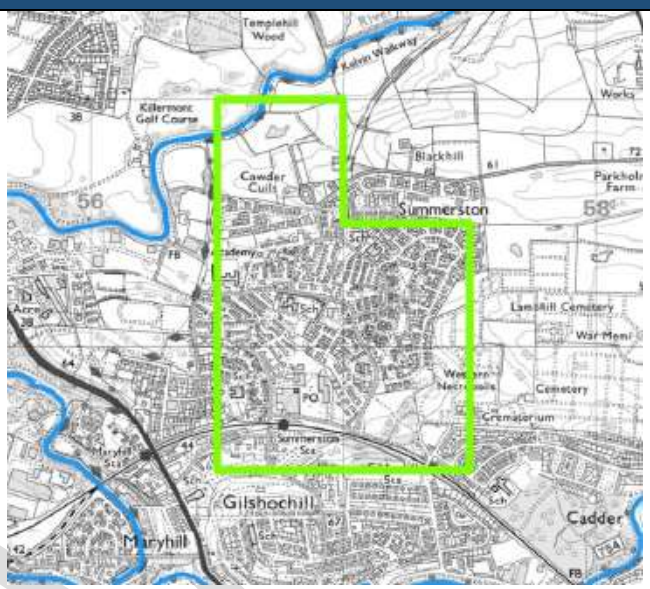
Local Flood Risk Management plan datasheet

Summerston (target area 160)

Summary

Summerston covers a small urban area of north-west Glasgow. It is within the Glasgow City Council area. The main source of flooding in Summerston is surface water. There are approximately 420 people and 210 homes and businesses currently at risk of flooding. This is likely to increase to 510 people and 260 homes and businesses 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 improved for surface water by the sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	1601	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1602	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1603	Reduce the risk of flooding in this target area

Action ID	Summerston		16001
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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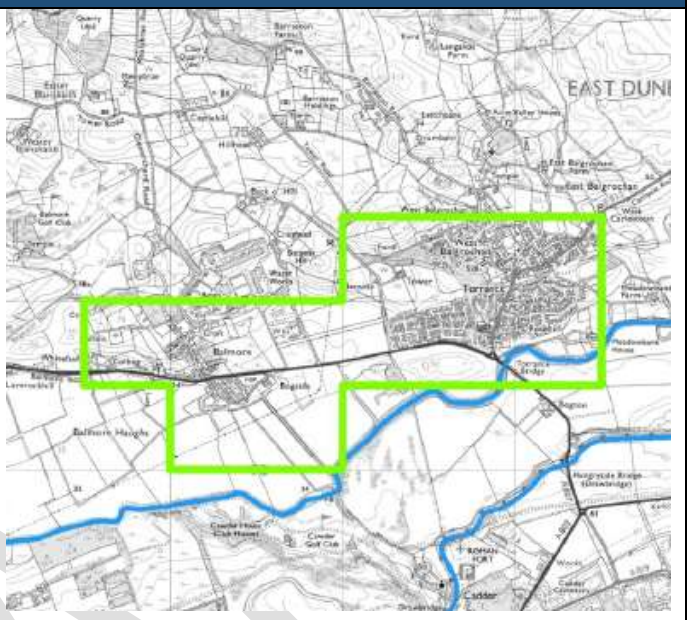
Local Flood Risk Management plan datasheet

Torrance and Balmore (target area 81001)

Summary

Torrance and Balmore are villages located along the northern fringe of Glasgow. It is within East Dunbartonshire Council area. The main source of flooding in Torrance and Balmore is from surface water flooding, however there is also risk from river flooding. There are approximately 110 people and 60 homes and businesses currently at risk from flooding. This is likely to increase to 190 people and 100 homes and businesses 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, and this information has highlighted the risk of flooding in this area. Torrance and Balmore has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	810011	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	810012	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	810013	Reduce the risk of flooding in this target area

Action ID	Torrance and Balmore		8100101
Action Type	Flood defence maintenance		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the River Kelvin Flood Protection Scheme 1998 should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Torrance and Balmore		8100102
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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2.3.5 PVA 02/11/05 (Glasgow City Centre)

This area is designated as a potentially vulnerable area due to the flood risk in Glasgow City Centre. The main source of flooding is from surface water. Recent floods have occurred in the area from 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

Glasgow centre west (target area 45001)
Glasgow centre east (target area 45002)

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Glasgow centre west (target area 45001)

Local Flood Risk Management plan datasheet
Glasgow centre West **(Target Ref: *45001*)**

Summary	Location Map
Glasgow Centre West covers an area of the city centre of Glasgow. It is in the Glasgow City Council area including the Scottish Event Campus (SEC). The main source of flooding in the area is surface water flooding, however there is also a risk from coastal (tidal) flooding. There are approximately 2,500 people and 1,400 homes and businesses currently at risk from flooding. This is likely to increase to 3,200 people and 1,800 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and for coastal flooding by the tidal Clyde model (December 2020). There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	450011	Avoid inappropriate development that increases flood risk in this target area

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Avoid flood risk	450012	Avoid an increase in flood risk by the appropriate management and maintenance of the flood defences along the River Clyde in the Exhibition Centre Quarter area
Improve data and understanding	450013	Improve data and understanding of the performance of the flood defences along the River Clyde in the Exhibition Centre Quarter area
Prepare for flooding	450014	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	450015	Reduce the risk of flooding in this target area

Action ID	Glasgow centre west		4500101
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.		

Action ID	Glasgow centre west		4500102
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Study of River Clyde flood defences following on the outputs from the tidal Clyde model update on the present performance of the River Clyde flood defences.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

Action ID	Glasgow centre west		4500103
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Glasgow centre west		4500104
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water.		

Action ID	Glasgow centre west		4500105
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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	Glasgow centre west		4500106
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the River Clyde flood defences should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

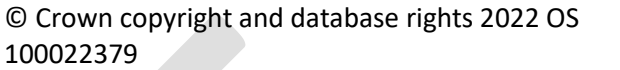
Action ID	Glasgow centre west		4500107
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing

Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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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Glasgow centre east (target area 45002)

Local Flood Risk Management plan datasheet
Glasgow centre East **(Target Ref: *45002*)**

Summary	Location Map
The Glasgow centre east covers the eastern section of central Glasgow. The area is located within the Glasgow City Council area. The main source of flooding in Glasgow centre east is surface water flooding. There are approximately 4,000 people and 3,600 homes and businesses currently at risk from flooding. This is likely to increase to 5,000 people and 4,500 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 flooding by the surface water management plan and sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	450021	Avoid inappropriate development that increases flood risk in this target area

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Avoid flood risk	450022	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures
Improve data and understanding	450023	Improve data and understanding of future river flooding in this target area
Prepare for flooding	450024	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	450025	Reduce the risk of surface water flooding in this target area

Action ID	Glasgow centre east		4500201
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to implement surface water management phase 1 measures in this target area.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in cocordination with SEPA.		

Action ID	Glasgow centre east		4500202
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

Action ID	Glasgow centre east		4500203
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Glasgow centre east		4500204
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the surface water management measures should be carried out on an ongoing basis following construction. The performance of the surface water management measures should be monitored under any significant events.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Glasgow centre east	4500205

Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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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2.3.6 PVA 02/11/06 (Glasgow City North)

This area is designated as a potentially vulnerable area due to flood risk to a number of communities. Some of these include Carntyn, Glasgow east end, and Springburn. The main sources of flooding are from river and surface water. Recent flooding has occurred in these communities.

There are 5 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

Glasgow east end (target area 47)
Carntyne (target area 49)
Springburn (target area 167)
Barlanark (target area 466)
Garthamlock (target area 16800)

DRAFT

Glasgow east end (target area 47)

Local Flood Risk Management plan datasheet
Glasgow east end **(Target Ref: *47*)**

Summary	Location Map
Glasgow east end covers the areas of Milnbank, Dennistoun, Camlachie and Bridgeton. It is within the Glasgow City Council area. The main source of flooding is from surface water, however there is also a risk of river flooding. There are approximately 5,200 people and 3,200 homes and businesses currently at risk from flooding. This is likely to increase to 6,000 people and 3,700 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 supporting the development of the Camlachie Burn Flood Protection Works. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	471	Avoid inappropriate development that increases flood risk in this target area

Avoid flood risk	472	Avoid an increase in flood risk by the appropriate management and maintenance of the Camlachie Burn conduit
Prepare for flooding	473	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	474	Reduce the risk of flooding in this target area

Action ID	Glasgow east end		4701
Action Type	Data collection		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	A condition survey should be carried out for Camlachie and Molendinar burn conduit to assess their physical condition and establish the current standard of protection/culvert capacity and the predicted for a number of climate change scenarios.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA to take forward opportunities for joint data collection activities.		

Action ID	Glasgow east end		4702
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the Camlachie Burn conduit should continue and updates to the maintenance regime be made based on the findings of the condition survey.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Glasgow east end 4703		
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

DRAFT

Carntyne (target area 49)

Local Flood Risk Management plan datasheet
Carntyne **(Target Ref: *49*)**

Summary	Location Map
The suburban area of Carntyne is located in east Glasgow, which is within the Glasgow City Council area. The main source of flooding in Carntyne is surface water flooding, however there is also a risk of river flooding. There are approximately 2,800 people at risk from flooding and approximately 1,600 homes and businesses. This is likely to increase to 3,200 people and 1,800 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 surface water management plan and sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description

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Avoid flood risk	491	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	492	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	493	Reduce the risk of flooding in this target area

Action ID	Carntyne		4901
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detail design of the preferred option identified for the Cockenzie Street surface water management plan phase 2 works to be developed. The detail design outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Carntyne		4902
Action Type	Community engagement		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

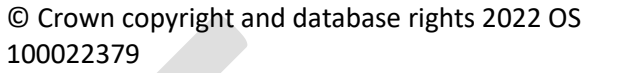
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

Action ID	Carntyne		4903
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

DRAFT

Springburn (target area 167)

Local Flood Risk Management plan datasheet
Springburn **(Target Ref: *167*)**

Summary	Location Map
Springburn covers a district of Glasgow that lies to the north of the city centre. It is within the Glasgow City Council area. The only source of flooding in Springburn is from surface water flooding. There are approximately 860 people and 460 homes and businesses currently at risk of flooding. This is likely to increase to 950 people and 520 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 sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1671	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1672	Prepare for current flood risk and future flooding as a result of climate change in this target area

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Reduce flood risk	1673	Reduce the risk of surface water flooding in this target area

Action ID	Springburn		16701
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Springburn		16702
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Barlanark (target area 466)

Local Flood Risk Management plan datasheet
Barlanark **(Target Ref: *466*)**

Summary	Location Map
The district of Barlanark is located in east Glasgow. It is within the Glasgow City Council area. The main source of flooding in Barlanark is surface water flooding. There are approximately 220 people and 120 homes and businesses currently at risk from flooding. This is likely to increase to 300 people and 160 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	4661	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	4662	Prepare for current flood risk and future flooding as a result of climate change in this target area

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Reduce flood risk	4663	Reduce the risk of surface water flooding in this target area

Action ID	Barlanark		46601
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Barlanark		46602
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to develop a surface water management plan following a review of the Scottish Water sewer and surface water flooding management outputs in the Wellhouse Crescent and Newhills Road area. The resulting surface water management plan will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water.		

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Garthamlock (target area 16800)

Local Flood Risk Management plan datasheet
Garthamlock **(Target Ref: *16800*)**

Summary	Location Map
Garthamlock is a north-eastern suburb of Glasgow and located to the north of the River Clyde. It is within the Glasgow City Council area. The main source of flooding in Garthamlock is surface water flooding. There are approximately 460 people and 250 homes and businesses at risk from flooding. This is estimated to increase to 620 people and 320 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description

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Avoid flood risk	168001	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures
Avoid flood risk	168002	Avoid inappropriate development that increases flood risk in this target area
Improve data and understanding	168003	Improve data and understanding of surface water flooding in this target area
Prepare for flooding	168004	Prepare for current flood risk and future flooding as a result of climate change in this target area

Action ID	Garthamlock		1680001
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Garthamlock		1680002
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the phase 1 surface water management measures in Cardowan should be carried out on an ongoing basis following construction. The performance of the surface water management measures should be monitored under any significant events.		

Funding	Revenue funding
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

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2.3.7 PVA 02/11/07 (Luggie Water catchment)

This area is designated as a potentially vulnerable area due to the flood risk to a number of communities. Some of these include Kirkintilloch, Lenzie and Cumbernauld. The main source of flooding is from surface water, however there is also river flooding from the River Kelvin and the Luggie Water. Recent flooding has occurred due to river and surface water flooding.

There are 4 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

Bishopbriggs east (target area 5)
Cumbernauld (target area 60)
Kirkintilloch South and Lenzie (target area 81)
Balornock (target area 16702)

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Bishopbriggs east (target area 5)

Local Flood Risk Management plan datasheet
Bishopbriggs east **(Target Ref: *5*)**

Summary	Location Map
Bishopbriggs east is a suburb of Glasgow. The area is located within the East Dunbartonshire and North Lanarkshire Council areas. The only source of flooding is surface water flooding. There are approximately 100 people at risk from flooding and approximately 50 homes and businesses. This is estimated to increase to 120 people and 60 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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

Objective	ID	Description
Avoid flood risk	51	Avoid inappropriate development that increases flood risk in Bishopbriggs

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Prepare for flooding	52	Prepare for current flood risk and future flooding as a result of climate change in Bishopbriggs
Reduce flood risk	53	Reduce the risk of flooding in Bishopbriggs

Action ID	Bishopbriggs east		501
Action Type	Flood scheme or works design		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to develop the works identified in the Bishopbriggs (East) surface water management plan to detailed design. The preferred option is comprised of a combination of underground storage, property flood protection, sustainable urban drainage systems retrofit, swales, bunds, and roof disconnection. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.		

Action ID	Bishopbriggs east		502
Action Type	Flood scheme or works implementation		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to develop the works identified in the Bishopbriggs (East) surface water management plan detailed design. The preferred option is comprised of a combination of underground storage, property flood protection, sustainable urban drainage systems retrofit, swales, bunds, and roof disconnection. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

Action ID	Bishopbriggs east		503
Action Type	Community engagement		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Bishopbriggs east		504
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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Cumbernauld (target area 60)

Local Flood Risk Management plan datasheet
Cumbernauld **(Target Ref: *60*)**

Summary	Location Map
Cumbernauld is within the East Dunbartonshire and North Lanarkshire local authority areas. The main source of flooding in Cumbernauld is surface water flooding, however there is also a risk from river flooding. There is approximately 780 people at risk from flooding and approximately 460 homes and businesses. This is estimated to increase to 920 people and 580 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by the Luggie Water Flood Study. There are periodic records of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	601	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	602	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	603	Reduce the risk of flooding in this target area

Action ID	Cumbernauld		6001
Action Type	Flood study (options appraisal)		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council in partnership with East Dunbartonshire Council to continue with the Luggie Water flood study and develop the options appraisal.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with East Dunbartonshire Council and SEPA.		

Action ID	Cumbernauld		6002
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	Following on the outputs from the Luggie Water flood study on the present performance of the Broadwood Loch flood protection scheme 1993, the study should focus primarily on establishing the predicted standard of protection for a number of climate change scenarios. This information will underpin the development of an adaptation plan for the long term protection of the community.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is North Lanarkshire Council in coordination with SEPA.

Action ID	Cumbernauld		6003
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir and Dunnswood sewer catchments 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Cumbernauld		6004
Action Type	Surface water management plan		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to develop a surface water management plan, review and implement any feasible options as and when funding is available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.		

Kirkintilloch South and Lenzie (target area 81)

Local Flood Risk Management plan datasheet
Kirkintilloch South and Lenzie **(Target Ref: *81*)**

Summary	Location Map
Kirkintilloch South and Lenzie are located within the East Dunbartonshire and North Lanarkshire Council areas. The main source of flooding in Kirkintilloch South and Lenzie is surface water flooding, however there is also a risk of river flooding. There are approximately 1,500 people and 760 homes and businesses currently at risk from flooding. This is likely to increase to 2,300 people and 1,100 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 River Kelvin and tributaries study and the flood studies that have supported the development of the Park Burn Flood Protection Works. Understanding is improved for surface water by the sewer flood risk assessment. There is a long record of

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flooding in this target area, most notably in December 1994, when persistent rain over a 48 hour period caused widespread flooding in the target area.

Objective	ID	Description
Avoid flood risk	811	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	812	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	813	Reduce the risk of flooding in this target area

Action ID	Kirkintilloch South and Lenzie		8101
Action Type	Flood scheme or works implementation		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to complete the Park Burn Flood Prevention Works.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.		

Action ID	Kirkintilloch South and Lenzie		8102
Action Type	Flood study		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	East Dunbartonshire Council to undertake joint working with North Lanarkshire Council to understand flood risk from the Luggie Water.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with North Lanarkshire Council and SEPA.

Action ID	Kirkintilloch South and Lenzie		8103
Action Type	Flood study		
Action Delivery Lead	East Dunbartonshire Council	Indicative Delivery	See delivery statement
Description	In coordination with Glasgow City Council and SEPA, East Dunbartonshire to complete the natural flood management study for their sections of the River Kelvin and tributaries. The findings from the river restoration feasibility studies carried out by the local authority for Park Burn, Allander Water and Luggie Water should be used if required.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA and Glasgow City Council.		

Action ID	Kirkintilloch South and Lenzie		8104
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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Balornock (target area 16702)

Local Flood Risk Management plan datasheet
Balornock **(Target Ref: *16702*)**

Summary	Location Map
Balornock is a suburb of Glasgow. It is located within the Glasgow City Council area. The only source of flooding is surface water. There are approximately 160 people and 90 homes and businesses currently at risk from flooding. This is likely to increase to 170 people and 100 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	167021	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	167022	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	167023	Reduce the risk of flooding in this target area

Action ID	Balornock		1670201
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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2.3.8 PVA 02/11/08 (Strathblane)

This area is designated as a potentially vulnerable area due to flood risk in Strathblane. The main sources of flooding are from river and surface water. Recent flooding has occurred in the area.

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

Strathblane (target area 152)

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Strathblane (target area 152)

Local Flood Risk Management plan datasheet
Strathblane **(Target Ref: *152*)**

Summary	Location Map
Strathblane is a village located in the Stirling Council area. The main source of flooding in Strathblane is river flooding, however there is also risk from surface water flooding. There are approximately 130 people and 70 homes and businesses currently at risk from flooding.	© Crown copyright and database rights 2022 OS 100022379

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. River monitoring equipment has been installed by the local authority to improve the national level assessment for river flooding and to improve operational response to flooding. The national assessment for surface water flooding is improved by sewer flood risk assessment carried out by Scottish Water. A number of floods have been recorded in the Strathblane area. A flood was recorded in December 2015 due to Storm Desmond. A recent river and surface water flood also occurred in July 2019 which resulted in damage to homes.

Objective	ID	Description
Avoid flood risk	1521	Avoid inappropriate development that increases flood risk in Strathblane
Prepare for flooding	1522	Prepare for current flood risk and future flooding as a result of climate change in Strathblane

Reduce flood risk	1523	Reduce the risk of flooding from small watercourses and surface water in Strathblane

Action ID	Strathblane		15201
Action Type	Data collection		
Action Delivery Lead	Stirling Council	Indicative Delivery	See delivery statement
Description	A flood study has been undertaken for Strathblane but modelling results are not robust enough. Rain gauge instrumentation is scheduled to be installed to gather further information that can be used to update modelling and consequently the flood study outputs. This will improve understanding of river and surface water flood risk and consider options for flood risk management.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Stirling Council in coordination SEPA to take forward joint data collection activities.		

Action ID	Strathblane		15202
Action Type	Flood study		
Action Delivery Lead	Stirling Council	Indicative Delivery	See delivery statement
Description	A combined surface water and river flood study has been developed for Strathblane to improve understanding of flood risk and assess possible flood management options. However, further data is required to verify the model. Flow measuring instrumentation is scheduled to be installed. Flood study will be updated once further data becomes available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Stirling Council and coordination will be determined once the actions have been finalised.		

Action ID	Strathblane		15203
Action Type	Community engagement		
Action Delivery Lead	Stirling Council	Indicative Delivery	See delivery statement
Description	Awareness raising and community engagement should be based on current understanding and informed by the development of a flood study. Stirling Council have commissioned the Conservation Trust to work with the community to develop resilience measures on the basis of flood study outputs and community priorities.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Stirling Council and coordination will be determined once the actions have been finalised.		

Action ID	Strathblane		15204
Action Type	Community resilience group		
Action Delivery Lead	Community group	Indicative Delivery	See delivery statement
Description	Where communities are prepared to develop community resilience plans the Stirling Council facilitates development of the plans and provide a stock of sandbag replacements for emergency use as part of the plan.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is the community and coordination will be determined once the actions have been finalised.		

2.3.9 PVA 02/11/09 (Coatbridge and Airdrie)

This area is designated as a potentially vulnerable area due to the flood risk to Airdrie, Chapelhall, Coatbridge and Plains. The main source of flooding is from surface water, with some risk from river and groundwater in Plains. Recent flooding has been caused by surface water flooding.

There are 4 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

Airdrie (target area 102)
Coatbridge (target area 106)
Chapelhall (target area 161)
Plains (target area 10300)

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Airdrie (target area 102)

Local Flood Risk Management plan datasheet
Airdrie **(Target Ref: *102*)**

Summary	Location Map
Airdrie is located approximately 20km east of Glasgow, within the North Lanarkshire local authority area. The main source of flooding in Airdrie is surface water flooding, however there is also risk of river flooding. There are approximately 1,300 people and 670 homes and businesses currently at risk from flooding. This is likely to increase to 1,500 people and 770 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by a sewer flood risk assessment and an ongoing surface water management plan. There is a long record of flooding in this target area.

Objective	ID	Description

Avoid flood risk	1021	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1022	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1023	Reduce the risk of flooding in this target area

Action ID	Airdrie		10201
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to complete the development of a surface water management plan and review options.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with SEPA.		

Action ID	Airdrie		10202
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to review the surface water management plan and collaborate with Scottish Water in respect to their sewer flood risk assessment. If flood risk is confirmed in the target area a scoping study should be carried out to identify the future studies and works required to achieve the objectives avoid, reduce and prepare.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.		

Action ID	Airdrie		10203
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Coatbridge (target area 106)

Local Flood Risk Management plan datasheet
Coatbridge **(Target Ref: *106*)**

Summary	Location Map
Coatbridge is a town located in North Lanarkshire local authority area. The main source of flooding in Coatbridge is surface water flooding, however there is also risk of river flooding. There are around 2,500 people and 1,400 homes and businesses currently at risk from flooding. This is likely to increase to 3,400 people and 1,900 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by a sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1061	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1062	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1063	Reduce the risk of flooding in this target area

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Action ID	Coatbridge		10601
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Coatbridge		10602
Action Type	Flood warning scoping		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	Scoping for a river and surface water flood warning scheme will be carried out in Coatbridge.		
Funding	SEPA’s role in this action is funded by Scottish Government through SEPA’s grant in aid settlement.		
Coordination	Action delivery lead is SEPA in coordination with North Lanarkshire Council.		

Chapelhall (target area 161)

Local Flood Risk Management plan datasheet
Chapelhall **(Target Ref: *161*)**

Summary	Location Map
Chapelhall is a village located near the North Calder Water and within the North Lanarkshire local authority area. The only source of flooding in Chapelhall is surface water flooding. There are approximately 30 people and 30 homes and businesses currently at risk of flooding. This is likely to increase to 50 people and 40 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by a sewer flood risk assessment. Together, this information has highlighted the risk of flooding in this area. Chapelhall has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1611	Avoid inappropriate development that increases flood risk in Chapelhall
Improve data and understanding	1612	Improve data and understanding of surface water flooding in Chapelhall

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Action ID	Chapelhall		16101
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Plains (target area 10300)

Local Flood Risk Management plan datasheet
Plains **(Target Ref: *10300*)**

Summary	Location Map
Plains is a village located on the outskirts of Airdrie in North Lanarkshire local authority area, on the northern side of the North Calder Water. SEPA strategic flood modelling indicates the main source of flooding in Plains is from surface water, with additional risk from river flooding. There are however known issues in the area relating to groundwater flooding.	© Crown copyright and database rights 2022 OS 100022379

What is the Current understanding of Flood risk
This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this area. Plains has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	103001	Avoid inappropriate development that increases flood risk in Plains
Improve data and understanding	103002	Improve data and understanding of groundwater flooding in Plains

Action ID	Plains	1030001

DRAFT

Action Type	Flood risk management review		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2028
Description	No local actions specific to this target area have been identified yet. There are national actions planned that will cover this area, including an update to SEPA's surface water flood maps and an update to the national flood risk assessment. These, along with other actions that are carried out across the whole local plan district covering this area, will help to manage flood risk in the long term. The need for actions for this area will be reviewed again in 2026.		
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.		

DRAFT

2.3.10 PVA 02/11/10 (East of Glasgow to Strathaven)

This area is designated as a potentially vulnerable area due to flood risk to a number of communities. Some of these include Cambuslang, Hamilton, Shettleston, Uddingston and East Kilbride. The main source of flooding is from surface water, however there is also some river flooding. Recent river flooding has occurred in the area.

There are 10 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

Hamilton west (target area 1)
Uddingston (target area 93)
Strathaven (target area 101)
East Kilbride east (target area 108)
Easterhouse south (target area 156)
Dalmarnock (target area 48001)
Tollcross (target area 48002)
Carmyle (target area 80001)
Cambuslang west (target area 80002)
Cambuslang east (target area 80003)

DRAFT

Hamilton west (target area 1)

Local Flood Risk Management plan datasheet
Hamilton west **(Target Ref: *1*)**

Summary	Location Map
The Hamilton West area covers west Hamilton and all of Blantyre. The area is located within the South Lanarkshire Council area. The main source of flooding is surface water flooding, however there is also a risk of river flooding. There are approximately 1,700 people at risk from flooding and approximately 990 homes and businesses. This is likely to increase to 2,300 people and 1,300 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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

Objective	ID	Description
Avoid flood risk	11	Avoid inappropriate development that increases flood risk in this target area

DRAFT

Prepare for flooding	12	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	13	Reduce the risk of flooding in this target area

Action ID	Hamilton west		101
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.		

Action ID	Hamilton west		102
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes the Hamilton and Bothwellbank sewer catchments 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Hamilton west		103
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	The surface water management plan for Hamilton should be completed. Flood risk should be quantified for present day and future flood risk. The interactivity between surface water and river flooding should be assessed. If flood risk is confirmed, scoping of the next steps should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.		

DRAFT

Uddingston (target area 93)

Local Flood Risk Management plan datasheet
Uddingston **(Target Ref: *93*)**

Summary	Location Map
The town of Uddingston is located on the east bank of the River Clyde, and within the South Lanarkshire local authority area. The main sources of flooding in Uddingston is river and surface water flooding. There are approximately 290 people and approximately 160 homes and businesses currently at risk of flooding. This is likely to increase to 540 people and 290 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 ongoing River Clyde Flood Modelling and Mapping study and improved for surface water flooding by a sewer flood risk assessment. There are periodic records of flooding in this target area.

DRAFT

Objective	ID	Description
Avoid flood risk	931	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	932	Avoid an increase in flood risk by the appropriate management and maintenance of the Meadowbank Flood Bund Flood Protection Scheme
Prepare for flooding	933	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	934	Reduce the risk of flooding in this target area

Action ID	Uddingston		9301
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set. The study should focus primarily on establishing the predicted standard of protection for a number of climate change scenarios at the Meadowbank Flood Bund. This information will underpin the development of an adaptation plan for the long term protection of the community.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Uddingston	9302
Action Type	Flood defence maintenance	

Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Meadowbank Flood Bund Flood Protection Scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Uddingston		9303
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

DRAFT

Strathaven (target area 101)

Local Flood Risk Management plan datasheet
Strathaven **(Target Ref: *101*)**

Summary	Location Map
Strathaven is a town in the South Lanarkshire Council area, located south of Glasgow on the banks of Powmillion Burn and just north of Avon Water. The main source of flooding in Strathaven is river flooding, however there is also a risk of surface water flooding. There are approximately 210 people and 160 homes and businesses currently at risk from flooding. This is likely to increase to 270 people and 200 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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

DRAFT

Objective	ID	Description
Avoid flood risk	1011	Avoid inappropriate development that increases flood risk in Strathaven
Prepare for flooding	1012	Prepare for current flood risk and future flooding as a result of climate change in Strathaven
Reduce flood risk	1013	Reduce the risk of flooding in Strathaven

Action ID	Strathaven		10101
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	A review of the Strathaven study should be carried out regarding the flooding source and mechanisms and the feasible flood protection options. The impacts of climate change on flood risk should be evaluated. If flood risk is confirmed, scoping of the flood protection options should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

DRAFT

East Kilbride east (target area 108)

Local Flood Risk Management plan datasheet
East Kilbride east **(Target Ref: *108*)**

Summary	Location Map
This covers the eastern area of the town East Kilbride, which is located to the south of Glasgow and within the South Lanarkshire Council area. The main source of flooding in East Kilbride east is surface water flooding, however there is also a risk from river flooding. There are approximately 1,300 people and 750 homes and businesses currently at risk from flooding and approximately. This is likely to increase to 1,600 people and 930 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 and the interactions between different flood sources by an integrated catchment study. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1081	Avoid inappropriate development that increases flood risk in this target area

DRAFT

Prepare for flooding	1082	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1083	Reduce the risk of flooding in this target area

Action ID	East Kilbride east		10801
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Allers and Philipshill sewer catchments 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	East Kilbride east		10802
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	South Lanarkshire Council to develop a surface water management plan working with Scottish Water as appropriate, to gain an understanding of the hotspots of flooding and potential interaction with river flooding. The impacts of climate change on surface water flood risk should be considered. Where flood risk is confirmed, scoping of the flood protection options should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

DRAFT

Easterhouse south (target area 156)

Local Flood Risk Management plan datasheet
Easterhouse south **(Target Ref: *156*)**

Summary	Location Map
Easterhouse south is a north-eastern suburb of Glasgow, within the Glasgow City Council area. The main source of flooding in Easterhouse south is surface water, however there is also a risk from river flooding. There are approximately 310 people and 160 homes and businesses currently at risk from flooding. This is likely to increase to 380 people and 190 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	1561	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1562	Prepare for current flood risk and future flooding as a result of climate change in this target area

Reduce flood risk	1563	Reduce the risk of flooding in this target area

Action ID	Easterhouse south		15601
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to develop options appraisal for the Tollcross Burn catchment surface water management phase 2 . The potential for natural flood management should be investigated. The options appraisal study outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Easterhouse south		15602
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie and Dalmarnock sewer catchments 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

DRAFT

Dalmarnock (target area 48001)

Local Flood Risk Management plan datasheet
Dalmarnock **(Target Ref: *48001*)**

Summary	Location Map
The area of Dalmarnock is located in Glasgow, on the River Clyde and within the Glasgow City and South Lanarkshire Council areas. The main source of flooding in the catchment is river flooding, however there is also risk from surface water flooding. There are approximately 1,900 people and 1,000 homes and businesses currently at risk from flooding. This is likely to increase to 3,500 people and 1,900 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and for river flooding by the tidal Clyde model (December 2020) and the ongoing River Clyde Flood Modelling and Mapping study. Understanding is also improved for river flooding by the flood warning scheme. There is a long record of flooding in this target area.

Objective	ID	Description

DRAFT

Avoid flood risk	480011	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	480012	Avoid an increase in flood risk by the appropriate management and maintenance of the Dalmarnock Flood Bund Flood Protection Scheme
Improve data and understanding	480013	Improve data and understanding of the performance of the Dalmarnock Flood Bund Flood Protection Scheme
Improve data and understanding	480014	Improve data and understanding of surface water flooding in this target area
Prepare for flooding	480015	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	480016	Reduce the risk of flooding in this target area

Action ID	Dalmarnock		4800101
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Glasgow City Council and SEPA.		

Action ID	Dalmarnock		4800102
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set. The scoping study		

	should include the outputs from the River Clyde flood study on the present performance of the Dalmarnock flood bund, and establish the predicted standard of protection for a number of climate change scenarios. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.

Action ID	Dalmarnock		4800103
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Dalmarnock		4800104
Action Type	Flood defence maintenance		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	Ongoing

DRAFT

Description	Maintenance to the Dalmarnock Flood Bund Flood Protection Scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.
Funding	Revenue funding
Coordination	Action delivery lead is Clyde Gateway in coordination with South Lanarkshire Council.

Action ID	Dalmarnock		4800105
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		
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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

DRAFT

Tollcross (target area 48002)

Local Flood Risk Management plan datasheet
Tollcross **(Target Ref: *48002*)**

Summary	Location Map
Tollcross is located to the east of Glasgow. It is also located within the Glasgow City Council area. The main source of flooding in Tollcross is river flooding, however there is also risk from surface water flooding. There are approximately 3,300 people and 1,600 homes and businesses currently at risk from flooding. This is likely to increase to 3,700 people and 1,800 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 surface water management plan and sewer flood risk assessment. Understanding has also improved for river flooding by the Tollcross Burn de-culverting and river basin management project. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	480021	Avoid inappropriate development that increases flood risk in this target area

Prepare for flooding	480022	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	480023	Reduce the risk of flooding in this target area

Action ID	Tollcross		4800201
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detail design of the preferred option identified for the Shettleston surface water management plan phase 1 to be developed. The detail design outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.		

Action ID	Tollcross		4800202
Action Type	Community engagement		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A Community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Tollcross		4800203
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmarnock 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

DRAFT

Carmyle (target area 80001)

Local Flood Risk Management plan datasheet
Carmyle **(Target Ref: *80001*)**

Summary	Location Map
The eastern Glasgow suburb of Carmyle is located on the River Clyde. It is within the Glasgow City and South Lanarkshire Council areas. The main source of flooding in the catchment is surface water flooding, however there is also risk of river flooding. There are approximately 140 people and 120 homes and businesses currently at risk from flooding. This is likely to increase to 430 people and 300 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and for river flooding by the ongoing River Clyde Flood Modelling and Mapping Study. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	800011	Avoid inappropriate development that increases flood risk in this target area

DRAFT

Prepare for flooding	800012	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	800013	Reduce the risk of flooding in this target area

Action ID	Carmyle		8000101
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.		

Action ID	Carmyle		8000102
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		
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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood		

	warning, and engage with communities about the service when required.

Action ID	Carmyle		8000103
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

DRAFT

Cambuslang west (target area 80002)

Local Flood Risk Management plan datasheet
Cambuslang west **(Target Ref: *80002*)**

Summary	Location Map
The western section of the town of Cambuslang is located east of Glasgow on the River Clyde. It is mostly in the South Lanarkshire local authority areas. The main source of flooding in the catchment is surface water flooding, however there is also risk from river flooding. There are approximately 1,600 people and 910 homes and businesses currently at risk from flooding. This is likely to increase to 2,100 people and 1,200 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Eastfield and Muirbank Surface Water Management Plan. Understanding is also improved for river flooding by the flood warning scheme. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	800021	Avoid inappropriate development that increases flood risk in this target area

DRAFT

Prepare for flooding	800022	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	800023	Reduce the risk of flooding in this target area

Action ID	Cambuslang west		8000201
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.		

Action ID	Cambuslang west		8000202
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Cambuslang west		8000203
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	South Lanarkshire Council to review the surface water management plan outputs in collaboration with Scottish Water. If flood risk is confirmed, scoping of the next steps should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.		

Action ID	Cambuslang west		8000204
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		
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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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Cambuslang east (target area 80003)

Local Flood Risk Management plan datasheet
Cambuslang east **(Target Ref: *80003*)**

Summary	Location Map
The eastern section of the town of Cambuslang is located east of Glasgow on the River Clyde. The area is in the South Lanarkshire Local Council area. The main source of flooding in the area is surface water flooding, however there is also a risk from river flooding. There are approximately 1,400 people and 710 homes and businesses currently at risk from flooding. This is likely to increase to 1,700 people and 920 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 assessments carried out in support of the Clydesmill Flood Protection Scheme has underpinned the understanding of river flood risk. Understanding is also improved for river flooding by the flood warning scheme. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	800031	Avoid inappropriate development that increases flood risk in this target area

DRAFT

Avoid flood risk	800032	Avoid an increase in flood risk by the appropriate management and maintenance of the Clydesmill Flood Protection Scheme in the River Clyde
Prepare for flooding	800033	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	800034	Reduce the risk of flooding in this target area

Action ID	Cambuslang east		8000301
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set. This will include a review of the present and future performance of the Clydesmill Flood Protection Scheme.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.		

Action ID	Cambuslang east		8000302
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Cambuslang east		8000303
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	South Lanarkshire Council to review the surface water management plan outputs in collaboration with Scottish Water. If flood risk is confirmed, scoping of the next steps should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.		

Action ID	Cambuslang east		8000304
Action Type	Flood defence maintenance		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Clydesmill Flood Protection Scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Cambuslang east	8000305

Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		
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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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2.3.11 PVA 02/11/11 (Clyde catchment - Motherwell to Larkhall)

This area is designated as a potentially vulnerable area due to flood risk to a number of communities. Some of these include Hamilton, Holytown, Larkhall and Motherwell. The main sources of flooding are from surface water and river flooding from the River Clyde and tributaries. There have been widespread reports of flooding in the area, with the most of them caused by surface water.

There are 7 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

Holytown and New Stevenston (target area 10)
Larkhall (target area 82)
Motherwell (target area 86)
Newarthill (target area 87)
Wishaw south (target area 94)
Bellshill (target area 104)
Hamilton east (target area 112)

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Holytown and New Stevenston (target area 10)

Local Flood Risk Management plan datasheet
Holytown and New Stevenston **(Target Ref: *10*)**

Summary	Location Map
Holytown and New Stevenston are villages located just north of Motherwell, in the North Lanarkshire local authority area. The main source of flooding in Holytown and New Stevenston is surface water flooding, however there is also a risk from river flooding. There are approximately 540 people and 270 homes and businesses currently at risk from flooding. This is estimated to increase to 750 people and 370 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 and surface water flood risk by the Holytown Flood Study (stage 1). There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	101	Avoid inappropriate development that increases flood risk in this target area

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Prepare for flooding	102	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	103	Reduce the risk of flooding in this target area

Action ID	Holytown and New Stevenston		1001
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Holytown and New Stevenston		1002
Action Type	Surface water management plan		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to develop a surface water management plan based on the outputs from the surface water study. The plan should be reviewed and updated regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.		

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Larkhall (target area 82)

Local Flood Risk Management plan datasheet
Larkhall **(Target Ref: *82*)**

Summary	Location Map
Larkhall is a town between the River Clyde and Avon Water within the South Lanarkshire Council area. The main source of flooding in Larkhall is surface water flooding, however there is also a risk of river flooding. There are around 400 people and 240 homes and businesses currently at risk from flooding. This is likely to increase to 580 people and 340 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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. A 2006 flood study in support of the Golf Gardens Flood Protection Scheme has underpinned the understanding of river flood risk. The national level assessment is also improved for surface water flooding by a sewer flood risk assessment. There are periodic records of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	821	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	822	Avoid an increase in flood risk by the appropriate management and maintenance of the Golf Gardens flood protection scheme 2006
Prepare for flooding	823	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	824	Reduce the risk of flooding in this target area

Action ID	Larkhall		8201
Action Type	Flood defence maintenance		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Golf Gardens Flood Protection Scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

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Motherwell (target area 86)

Local Flood Risk Management plan datasheet
Motherwell **(Target Ref: *86*)**

Summary	Location Map
The town of Motherwell is located south-east of Glasgow within the North Lanarkshire local authority area. It also includes a small part of South Lanarkshire local authority area. The main source of flooding in Motherwell is surface water flooding, however there is also a risk of river flooding. There are approximately 2,300 people at risk from flooding and approximately 1,100 homes and businesses. This is likely to increase to 2,700 people and 1,400 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by the ongoing River Clyde Flood Mapping and Modelling study and improved for surface water flood risk by a sewer flood risk assessment. Understanding is also

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improved for river flooding by the flood warning scheme. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	861	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	862	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	863	Reduce the risk of flooding in this target area

Action ID	Motherwell		8601
Action Type	Flood study		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire to carry out a review of the River Clyde Flood Mapping and Modelling study, surface water management plan and sewer flood risk assessment. If flood risk is confirmed in the target area a scoping study should be carried out to identify the future studies and works required to achieve the objectives avoid, reduce and prepare.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water and SEPA.		

Action ID	Motherwell		8602
Action Type	Flood study (options appraisal)		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement

Description	Following on the outputs from the River Clyde Flood Mapping and Modelling study developed by South Lanarkshire Council, North Lanarkshire Council should carry out an options appraisal to further investigate the feasibility of flood protection work in Greenacres.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with South Lanarkshire Council and SEPA.

Action ID	Motherwell		8603
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Carbarns and Daldowie sewer catchments 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Motherwell		8604
Action Type	Surface water management plan		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

Action ID	Motherwell		8605
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		
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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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Newarthill (target area 87)

Local Flood Risk Management plan datasheet
Newarthill **(Target Ref: *87*)**

Summary	Location Map
The small village of Newarthill, is located three kilometres north-east of Motherwell within the North Lanarkshire local authority area. The main source of flooding in Newarthill is surface water flooding, however there is also a risk of river flooding. There are approximately 240 people and 120 homes and businesses at risk of flooding. This is likely to increase to 290 people and 150 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by a sewer flood risk assessment. Together, this information has highlighted the risk of flooding in this area. Newarthill has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

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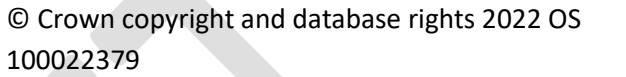
Objective	ID	Description
Avoid flood risk	871	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	872	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	873	Reduce the risk of flooding in this target area

Action ID	Newarthill		8701
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Wishaw south (target area 94)

Local Flood Risk Management plan datasheet
Wishaw South **(Target Ref: *94*)**

Summary	Location Map
Wishaw south covers the south side of Wishaw, a large town located on the edge of the Clyde Valley. The area is located within the North Lanarkshire local authority area. The main source of flooding in Netherton is surface water flooding. There are approximately 780 people at risk from flooding and approximately 390 homes and businesses. This is likely to increase to 1,100 people 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 flood risk by a sewer flood risk assessment. There is a long record of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	941	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	942	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	943	Reduce the risk of flooding in this target area

Action ID	Wishaw south		9401
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Carbarns 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Bellshill (target area 104)

Local Flood Risk Management plan datasheet
Bellshill **(Target Ref: *104*)**

Summary	Location Map
Bellshill area includes the towns of Bellshill, Orbiston and Milnwood, and is located to the north of the South Calder Water. The area is located within the North Lanarkshire local authority area. The main source of flooding in Bellshill is surface water flooding and there is also risk from river flooding. There are approximately 930 people and 460 homes and businesses currently at risk from flooding. This is likely to increase to 1,300 people and 650 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by a sewer flood risk assessment. There is a long record of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	1041	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1042	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1043	Reduce the risk of flooding in this target area

Action ID	Bellshill		10401
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Daldowie 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Hamilton east (target area 112)

Local Flood Risk Management plan datasheet
Hamilton east **(Target Ref: *112*)**

Summary	Location Map
The town of Hamilton is located south-east of Glasgow and is within the South Lanarkshire Council area. The main source of flooding in Hamilton east is river flooding, however there is also a risk from surface water flooding. There are approximately 910 people at risk from flooding and approximately 520 homes and businesses. This is estimated to increase to 1,200 people and 670 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 ongoing River Clyde Flood Modelling and Mapping study and improved for surface water flooding by a sewer flood risk assessment. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1121	Avoid inappropriate development that increases flood risk in this target area

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Prepare for flooding	1122	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1123	Reduce the risk of flooding in this target area

Action ID	Hamilton east		11201
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update (including Avon Water, Covan Burn and Cadzow Burn), a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.		

Action ID	Hamilton east		11202
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	The surface water management plan for Hamilton should be completed. Flood risk should be quantified for present day and future flood risk. The interactivity between surface water and river flooding should be assessed. If flood risk is confirmed, scoping of the next steps should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.		

Action ID	Hamilton east		11203
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Hamilton 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Hamilton east		11204
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		
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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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2.3.12 PVA 02/11/12 (Clyde catchment - Lanark to Lesmahagow)

This area is designated as a potentially vulnerable area due to the flood risk in Crossford (South Lanarkshire), Lesmahagow and Kirkfieldbank. The main source of flooding is from the River Clyde and its tributaries. There is the potential for an increased flood risk due to climate change in Lesmahagow. Recent flooding has occurred in the area.

There are 3 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

Crossford (South Lanarkshire) (target area 29)
Kirkfieldbank (target area 30)
Lesmahagow (target area 151)

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Crossford (South Lanarkshire) (target area 29)

Local Flood Risk Management plan datasheet
Crossford (South Lanarkshire) **(Target Ref: *29*)**

Summary	Location Map
The village of Crossford (South Lanarkshire) lies alongside the River Clyde and the River Nethan. The area is located within the South Lanarkshire Council area. The main source of flooding in Crossford is river flooding, however there is also a risk from surface water flooding. There are approximately 190 people at risk from flooding and approximately 120 homes and businesses. This is estimated to increase to 250 people and 150 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 ongoing River Clyde Flood Modelling and Mapping study and improved for surface water flooding by a sewer flood risk assessment. Understanding is also

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improved for river flooding by the flood warning scheme. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	291	Avoid inappropriate development that increases flood risk in Crossford
Prepare for flooding	292	Prepare for current flood risk and future flooding as a result of climate change in Crossford
Reduce flood risk	293	Reduce the risk of flooding in Crossford

Action ID	Crossford (South Lanarkshire)		2901
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.		

Action ID	Crossford (South Lanarkshire)		2902
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2025
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		

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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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.

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Kirkfieldbank (target area 30)

Local Flood Risk Management plan datasheet
Kirkfieldbank **(Target Ref: *30*)**

Summary	Location Map
The village of Kirkfieldbank is situated on the banks of the River Clyde and west of the town of Lanark. The area is located within South Lanarkshire Council area. The main source of flooding in Kirkfieldbank is river flooding. There are approximately 170 people at risk from flooding and approximately 100 homes and businesses. This is estimated to increase to 180 people and 110 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 ongoing River Clyde Flood Modelling and Mapping study. There are periodic records of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	301	Avoid inappropriate development that increases flood risk in Kirkfieldbank
Prepare for flooding	302	Prepare for current flood risk and future flooding as a result of climate change in Kirkfieldbank
Reduce flood risk	303	Reduce the risk of flooding in Kirkfieldbank

Action ID	Kirkfieldbank		3001
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

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Lesmahagow (target area 151)

Local Flood Risk Management plan datasheet
Lesmahagow **(Target Ref: *151*)**

Summary	Location Map
Lesmahagow is a town in South Lanarkshire Council area located on the banks of the River Nethan. The main sources of flooding in Lesmahagow are surface water and river flooding. There is approximately 110 people and 70 homes and businesses currently at risk from flooding. This is likely to increase to 160 people and 100 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

What is the Current understanding of Flood risk
This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by a sewer flood risk assessment. Together, this information has highlighted the risk of flooding in this target area. Lesmahagow has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1511	Avoid inappropriate development that increases flood risk in Lesmahagow

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Prepare for flooding	1512	Prepare for current flood risk and future flooding as a result of climate change in Lesmahagow
Reduce flood risk	1513	Reduce the risk of flooding in Lesmahagow

Action ID	Lesmahagow		15101
Action Type	Flood risk management review		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2028
Description	No local actions specific to this target area have been identified yet. There are national actions planned that will cover this area, including an update to SEPA's surface water flood maps and an update to the national flood risk assessment. These, along with other actions that are carried out across the whole local plan district covering this area, will help to manage flood risk in the long term. The need for actions for this area will be reviewed again in 2026.		
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.		

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2.3.13 PVA 02/11/13 (Shotts)

This area is designated as a potentially vulnerable area due to flood risk in Allanton. The main source of flooding is groundwater, although there is also a risk from surface water and river flooding. There is a known drainage problem in Allanton due to the cessation of mining activities, with the groundwater table close to or above ground level. Historically there has been flooding in the area, with recent flooding being 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

Allanton (target area 169)

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Allanton (target area 169)

Local Flood Risk Management plan datasheet
Allanton **(Target Ref: *169*)**

Summary	Location Map
The village of Allanton lies between Wishaw and Shotts, which is within the North Lanarkshire local authority area. Flood risk indicates the main source of flooding in Allanton is river flooding with additional risk from surface water flooding. There are however known issues in the area relating to groundwater flooding.	© Crown copyright and database rights 2022 OS 100022379

What is the Current understanding of Flood risk
This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this area. Allanton has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1691	Avoid inappropriate development that increases flood risk in Allanton
Prepare for flooding	1692	Prepare for current flood risk in this target area
Reduce flood risk	1693	Reduce the risk of groundwater flooding in this target area

Action ID	Allanton	16901

Action Type	Flood study		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	North Lanarkshire Council to develop a flood study in Allanton with a focus on improving understanding on flood risk from groundwater sources. If flood risk is confirmed in the target area a scoping study should be carried out to identify the future studies and works required to achieve the objectives avoid, reduce and prepare.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with SEPA and Coal Authority.		

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2.3.14 PVA 02/11/14 (North of Wishaw)

This area is designated as a potentially vulnerable area due to flood risk in Wishaw. The main source of flooding is from surface water. Historically there has been flooding in this area, with recent flooding being caused by surface water flooding.

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

List of target areas

Wishaw North (target area 94001)

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Wishaw North (target area 94001)

Local Flood Risk Management plan datasheet
Wishaw North **(Target Ref: *94001*)**

Summary	Location Map
Wishaw is situated on the edge of the Clyde Valley, around 25km south-east of Glasgow city centre. The town is within the North Lanarkshire local authority area. The main source of flooding in the catchment is surface water flooding, however there is also risk from river flooding. There are approximately 300 people and 140 homes and businesses currently at risk from flooding. This is likely to increase to 380 people and 180 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by a sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	940011	Avoid inappropriate development that increases flood risk in this target area

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Prepare for flooding	940012	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	940013	Reduce the risk of flooding in this target area

Action ID	Wishaw north		9400101
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Carbarns 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Wishaw north		9400102
Action Type	Surface water management plan		
Action Delivery Lead	North Lanarkshire Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.		

2.3.15 PVA 02/11/15 (Symington and Coulter)

This area is designated as a potentially vulnerable area due to flood risk in Symington and Coulter. The main source of flooding is from the River Clyde, however there is also some surface water flooding. Recent floods have occurred due to river flooding and surface water 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

Symington (target area 114)
Coulter (target area 115)

DRAFT

Symington (target area 114)

Local Flood Risk Management plan datasheet
Symington **(Target Ref: *114*)**

Summary	Location Map
The village of Symington is located south-west of Biggar and is within the South Lanarkshire Council area. The main source of flooding in Symington is river flooding, however there is also a risk of surface water flooding. There are approximately 140 people and 90 homes and businesses at risk from flooding. This is likely to increase to 150 people by the 2080s due to climate change, while the number of homes and businesses at risk is likely to remain the same.	© Crown copyright and database rights 2022 OS 100022379

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 flood studies carried out prior to 2011 have underpinned the understanding of river flood risk. Together, this information has highlighted the risk of flooding in this target area. Symington has therefore been identified as a new target area for the 2021 flood risk management plans. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1141	Avoid inappropriate development that increases flood risk in Symington

Prepare for flooding	1142	Prepare for current flood risk and future flooding as a result of climate change in Symington
Reduce flood risk	1143	Reduce the risk of flooding in Symington

Action ID	Symington		11401
Action Type	Flood risk management review		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2028
Description	No local actions specific to this target area have been identified yet. There are national actions planned that will cover this area, including an update to SEPA's surface water flood maps and an update to the national flood risk assessment. These, along with other actions that are carried out across the whole local plan district covering this area, will help to manage flood risk in the long term. The need for actions for this area will be reviewed again in 2026.		
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.		

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Coulter (target area 115)

Local Flood Risk Management plan datasheet
Coulter **(Target Ref: *115*)**

Summary	Location Map
The village of Coulter is located 4km south of Biggar and it is within the South Lanarkshire Council area. The main source of flooding in Coulter is river flooding, however there is also a risk from surface water flooding. There are approximately 80 people and 50 homes and businesses at risk from flooding, which is a significant proportion of the community. This is estimated to increase to 100 people and 60 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Coulter flood study. Together, this information has highlighted the risk of flooding in this target area. Coulter has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1151	Avoid inappropriate development that increases flood risk in Coulter

Prepare for flooding	1152	Prepare for current flood risk and future flooding as a result of climate change in Coulter
Reduce flood risk	1153	Reduce the risk of flooding in Coulter

Action ID	Coulter		11501
Action Type	Flood study		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	A review of the Coulter flood study should be carried out, including a public survey regarding the flooding source and mechanisms and the feasible flood protection options. The impacts of climate change on flood risk should be evaluated. If flood risk is confirmed, scoping of the flood protection options should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

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2.3.16 PVA 02/11/16 (Rutherglen)

This area is designated as a potentially vulnerable area due to flood risk in Rutherglen, Castlemilk, Mount Florida and Polmadie. The main sources of flooding are river and surface water. Recent floods have occurred within this area.

There are 4 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

Rutherglen (target area 43001)
Polmadie (target area 43002)
Mount Florida (target area 43003)
Castlemilk east (target area 43004)

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Rutherglen (target area 43001)

Local Flood Risk Management plan datasheet
Rutherglen **(Target Ref: *43001*)**

Summary	Location Map
Rutherglen is on the south bank of the River Clyde within the South Lanarkshire and Glasgow City Council areas. The main source of flooding in Rutherglen is surface water flooding, however there is also a risk of river flooding from the Cityford Burn. There are approximately 3,300 people and 1,600 homes and businesses currently at risk from flooding. This is likely to increase to 3,800 people and 1,900 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Southeast Glasgow Surface Water Management Plan (2019), sewer flood risk assessment and Culverted watercourse study within Croftfoot area. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	430011	Avoid inappropriate development that increases flood risk in this target area

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Avoid flood risk	430012	Avoid an increase in flood risk by the appropriate management and maintenance of the Cityford Burn Culvert Flood Protection Scheme
Prepare for flooding	430013	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	430014	Reduce the risk of flooding in this target area

Action ID	Rutherglen		4300101
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to implement surface water management phase 4 measures in Croftfoot and King's Park.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Rutherglen		4300102
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the surface water management measures in Croftfoot and King's Park should be carried out by Glasgow City Council on an ongoing basis following construction. The performance of the surface water management measures should be monitored under any significant events.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Rutherglen		4300103
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Rutherglen		4300104
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	South Lanarkshire Council to review the outputs of the surface water management plan for Muirbank jointly with Scottish Water, to identify any future works/studies.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.		

Action ID	Rutherglen	4300105
Action Type	Flood defence maintenance	

Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	Ongoing
Description	South Lanarkshire Council is to continue to maintain the existing Cityford Burn Culvert Flood Protection Scheme.		
Funding	Revenue funding		
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.		

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Polmadie (target area 43002)

Local Flood Risk Management plan datasheet
Polmadie **(Target Ref: *43002*)**

Summary	Location Map
Polmadie is mainly an industrial zone of Glasgow and it is within the Glasgow City and South Lanarkshire Council areas. The main source of flooding in Polmadie is surface water flooding, however there is also a risk of river flooding from the Polmadie Burn and River Clyde. There are approximately 780 people and 440 homes and businesses currently at risk from flooding, which is a significant proportion of the community. This is likely to increase to 810 people and 480 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Southeast Glasgow Surface Water Management Plan (2019) and sewer flood risk assessment. Understanding of river flooding has been improved by the tidal Clyde model update (December 2020). There is a long record of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	430021	Avoid inappropriate development that increases flood risk in this target area
Improve data and understanding	430022	Improve data and understanding of flooding in this target area
Reduce flood risk	430023	Reduce the risk of surface water flooding in this target area

Action ID	Polmadie		4300201
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detail design of the preferred option identified for the Polamdie surface water management plan phase 3 measures to be developed. Outline design and community engagement has been completed. The detail design outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Polmadie		4300202
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		

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Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

Action ID	Polmadie		4300203
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	If flood risk is confirmed from the River Clyde flood model update, a scoping study should be carried out by South Lanarkshire Council to identify the future studies and works.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.		

Action ID	Polmadie		4300204
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Polmadie		4300205
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2022-2028
Description	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.		
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 coordinate flood warning improvements with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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Mount Florida (target area 43003)

Local Flood Risk Management plan datasheet
Mount Florida **(Target Ref: *43003*)**

Summary	Location Map
Mount Florida is an area located to the south east of Glasgow and is located within the Glasgow City Council area. The main source of flooding in Mount Florida is surface water flooding. There are approximately 800 people and 450 homes and businesses currently at risk from flooding. This is likely to increase to 1,200 people and 650 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Southeast Glasgow Surface Water Management Plan (2019) and sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	430031	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	430032	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures

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Prepare for flooding	430033	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	430034	Reduce the risk of surface water flooding in this target area

Action ID	Mount Florida		4300301
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to implement surface water management phase 4 measures in Croftfoot, King's Park and Overwood Drive / Aitkenhead Road.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Mount Florida		4300302
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the surface water management measures in Croftfoot, King's Park and Overwood Drive / Aitkenhead Road should be carried out by Glasgow City Council on an ongoing basis following construction. The performance of the surface water management measures should be monitored under any significant events.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Mount Florida		4300303
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Castlemilk east (target area 43004)

Local Flood Risk Management plan datasheet
Castlemilk East **(Target Ref: *43004*)**

Summary	Location Map
The Castlemilk district lies to the south of Glasgow. It is within the City of Glasgow and South Lanarkshire Council areas. The main source of flooding in Castlemilk is surface water flooding, however there is also risk from river flooding. There are approximately 1,200 people and 600 homes and businesses currently at risk from flooding. This is likely to increase to 1,400 people and 680 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 surface water management plan and Culverted Watercourses study. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	430041	Avoid inappropriate development that increases flood risk in this target area

Prepare for flooding	430042	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	430043	Reduce the risk of flooding in this target area

Action ID	Castlemilk east		4300401
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detail design of the preferred option identified for the Castlemilk surface water management plan to be developed. The detail design outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire.		

Action ID	Castlemilk east		4300402
Action Type	Community engagement		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A Community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire.		

Action ID	Castlemilk east		4300403
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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2.3.17 PVA 02/11/17 (White Cart Water catchment)

This area is designated as a potentially vulnerable area due to flood risk to a number of communities. Some of these include Barrhead, East Kilbride, Newtown Mearns, Paisley and Pollokshields. The main sources of flooding are from river and surface water. There is a flood protection scheme on the White Cart Water which protects several communities in the south side of Glasgow. There is a long history of flooding with recent floods being caused by river and surface water.

There are 14 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

Barrhead (target area 3)
Giffnock and Merrylee (target area 9)
Paisley east (target area 12)
Renfrew (target area 13)
Cathcart & Shawlands (target area 41)
Castlemilk west (target area 42)
Hillington and Cardonald (target area 55)
Pollok (target area 56)
Thornliebank (target area 57)
Newton Mearns (target area 58)
Busby (target area 59)
East Kilbride west (target area 109)
Plantation (target area 44001)
Pollokshields (target area 44002)

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Barrhead (target area 3)

Local Flood Risk Management plan datasheet
Barrhead **(Target Ref: *3*)**

Summary	Location Map
Barrhead is a town located south of Glasgow and within East Renfrewshire Council area. The main source of flooding is surface water, however there is also a risk of river flooding. There are approximately 1,400 people at risk from flooding and approximately 670 homes and businesses. This is likely to increase to 1,600 people and 800 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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

Objective	ID	Description
Avoid flood risk	31	Avoid inappropriate development that increases flood risk in this target area

DRAFT

Prepare for flooding	32	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	33	Reduce the risk of flooding in this target area

Action ID	Barrhead		301
Action Type	Flood study		
Action Delivery Lead	East Renfrewshire Council	Indicative Delivery	See delivery statement
Description	East Renfrewshire Council to review the outputs of the flood study and surface water management plan. If flood risk is confirmed a scoping study should be carried out to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Renfrewshire Council in coordination with SEPA.		

Action ID	Barrhead		302
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

DRAFT

Giffnock and Merrylee (target area 9)

Local Flood Risk Management plan datasheet
Giffnock and Merrylee **(Target Ref: *9*)**

Summary	Location Map
The Giffnock and Merrylee area covers a number of towns including Giffnock, Merrylee and part of Thornliebank. The area is located within the East Renfrewshire and Glasgow City Council areas. The main source of flooding in the area is river flooding, however there is also a risk from surface water flooding. There are approximately 3,000 people and 1,400 homes and businesses at risk from flooding. This is likely to increase to 3,500 people and 1,600 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 surface water management plan and the sewer flood risk assessment. There are periodic records of flooding in this target area.

Objective	ID	Description

DRAFT

Avoid flood risk	91	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	92	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	93	Reduce the risk of flooding in this target area

Action ID	Giffnock and Merrylee		901
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	In coordination with East Renfrewshire, Glasgow City Council to carry out a detailed study of the burns including culverted sections to identify any potential constraints and identify the flood risk to people and properties in Merrylee. The study outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council.		

Action ID	Giffnock and Merrylee		902
Action Type	Flood study		
Action Delivery Lead	East Renfrewshire Council	Indicative Delivery	See delivery statement
Description	East Renfrewshire Council to review the outputs of the surface water management plan and Scottish Water sewer flooding project in the Giffnock area. If flood risk is confirmed a scoping study should be carried out to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is East Renfrewshire Council in coordination with Glasgow City Council.

Action ID	Giffnock and Merrylee		903
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

DRAFT

Paisley east (target area 12)

Local Flood Risk Management plan datasheet
Paisley east **(Target Ref: *12*)**

Summary	Location Map
The Paisley east area covers the eastern half of the town of Paisley, which is located west of Glasgow. The area is located within the Renfrewshire Council area. The main sources of flooding in the area are river and surface water flooding. There are approximately 7,400 people at risk from flooding and approximately 4,200 homes and businesses. This is likely to increase to 9,300 people and 5,300 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment. There are frequent records of flooding in this target area.

Objective	ID	Description

DRAFT

Avoid flood risk	121	Avoid an increase in flood risk by the appropriate management and maintenance of Moredun Playing Field Flood Protection Scheme 1998
Avoid flood risk	122	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	123	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	124	Reduce the risk of flooding in this target area

Action ID	Paisley east		1201
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	This study is focused on investigating natural flood management options for the White Cart catchment that complements the protection offered by the flood protection schemes in the area.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water, Glasgow City Council, East Renfrewshire Council and SEPA.		

Action ID	Paisley east		1202
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Laighpark Paisley 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Paisley east		1203
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in this target area. The results of the integrated catchment study and sewer flood risk assessment should be considered. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.		

Action ID	Paisley east		1204
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Following on the outputs of the Paisley surface water management plan, White Cart natural flood management and sewer flood risk assessment, Renfrewshire council should develop a flood study to address flood risk from the Espedair Burn. This should include a review of the performance of the Moredun Flood Protection Scheme.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

Action ID	Paisley east		1205
Action Type	Flood defence maintenance		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Moredun Flood Protection Scheme should continue and updates to the maintenance regime made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Paisley east		1206
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA should investigate a potential extension to the White Cart flood warning scheme to include this area.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with Renfrewshire Council on the potential to coordinate flood warning development with the flood study investigation. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

Renfrew (target area 13)

Local Flood Risk Management plan datasheet
Renfrew **(Target Ref: *13*)**

Summary	Location Map
Renfrew lies west of Glasgow on the White Cart Water and the River Clyde within Renfrewshire and Glasgow City Council areas. The main source of flooding is coastal flooding, however there is also a risk from surface water flooding. Coastal flooding is managed by the Renfrew North Flood Prevention Scheme (2007). There are approximately 2,800 people and 1,800 homes and businesses currently at risk of flooding. This is likely to increase to 5,700 people and 3,300 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment. The flood studies that have supported the development of the Renfrew North Flood Prevention Scheme (2007) have underpinned the understanding of coastal flood risk. There are limited records of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	131	Avoid an increase in flood risk by the appropriate management and maintenance of Renfrew North flood protection scheme 2007
Avoid flood risk	132	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	133	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	134	Reduce the risk of flooding in this target area

Action ID	Renfrew		1301
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Renfrew		1302
Action Type	Adaptation plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrew North Flood Protection Scheme 2007 adaptation plan.		

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Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

Action ID	Renfrew		1303
Action Type	Flood defence maintenance		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Renfrew North Flood Protection Scheme 2007 should continue and updates to the maintenance regime made based on the findings of the adaptation plan. The as built drawings should be provided to SEPA, who will assess the need for updates to the flood warning scheme, flood maps and the Scottish Flood Defence Asset database.		
Funding	Revenue funding		
Coordination	Action delivery lead is Renfrewshire Council in coordination with SEPA.		

Action ID	Renfrew		1304
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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	Renfrew		1305
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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Cathcart & Shawlands (target area 41)

Local Flood Risk Management plan datasheet
Cathcart & Shawlands **(Target Ref: *41*)**

Summary	Location Map
Cathcart and Shawlands are primarily within the Glasgow City Council area, with a small section covered by East Renfrewshire Council. The main source of flooding in Cathcart and Shawlands is surface water flooding, however there is also a risk of river flooding. The completion of the White Cart Flood Protection Scheme has significantly reduced the risk of flooding.	© Crown copyright and database rights 2022 OS 100022379

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 development of the White Cart flood protection scheme, and for surface water flooding by the sewer flood risk assessment. The completion of the White Cart Flood Protection Scheme has significantly reduced the risk of flooding. The completion of the White Cart Flood Protection Scheme has significantly reduced the risk of flooding. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

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Objective	ID	Description
Avoid flood risk	411	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	412	Avoid an increase in flood risk by the appropriate management and maintenance of the White Cart Flood Protection Scheme 2002 in Auldhouse Burn and White Cart
Prepare for flooding	413	Prepare for current flood risk and future flooding as a result of climate change in in this target area
Reduce flood risk	414	Reduce the risk of surface water flooding in this target area

Action ID	Cathcart and Shawlands		4101
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	This study is focused on investigating natural flood management options for the White Cart catchment that complements the protection offered by the flood protection schemes in the area. The study outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council, SEPA and Scottish Water.		

Action ID	Cathcart and Shawlands		4102
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes		

	Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Cathcart and Shawlands		4103
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to develop a surface water management plan for this area (including Newlands). This should consider the outputs of Scottish Water's sewer flood risk assessment. The potential for natural flood management should be investigated.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council, SEPA and Scottish Water.		

Action ID	Cathcart and Shawlands		4104
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to develop a study of the White Cart Flood Protection Scheme 2002. This study should also include an investigation on the number of properties at risk of river flooding for a number of climate change scenarios. If flood risk is confirmed, scoping of the next steps should be completed.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council, SEPA and Scottish Water.

Action ID	Cathcart and Shawlands		4105
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the White Cart Flood Protection Scheme 2002 in Auldhouse Burn and White Cart should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.		

Action ID	Cathcart and Shawlands		4106
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the White Cart 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 coordinate flood warning development with the flood study investigations. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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Castlemilk west (target area 42)

Local Flood Risk Management plan datasheet
Castlemilk west **(Target Ref: *42*)**

Summary	Location Map
Castlemilk West is a residential area of south Glasgow. It is in the Glasgow City Council area. The main source of flooding in Castlemilk West is surface water flooding. There are approximately 1,200 people and 600 homes and businesses currently at risk of flooding. This is estimated to increase to 1,300 people and 660 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 surface water management plan and Culverted Watercourses study. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	421	Avoid inappropriate development that increases flood risk in Castlemilk west
Prepare for flooding	422	Prepare for current flood risk and future flooding as a result of climate change in Castlemilk west

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Reduce flood risk	423	Reduce the risk of surface water flooding in Castlemilk west

Action ID	Castlemilk west		4201
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detail design of the preferred option identified for the Castlemilk surface water management plan to be developed. The detail design outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Castlemilk west		4202
Action Type	Community engagement		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Castlemilk west	4203

Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Hillington and Cardonald (target area 55)

Local Flood Risk Management plan datasheet
Hillington and Cardonald **(Target Ref: *55*)**

Summary	Location Map
The Hillington and Cardonald area covers a district of Glasgow located on the banks of the River Clyde in the west of the city. It is located within the Renfrewshire and Glasgow City Council areas. The main source of flooding in Hillington and Cardonald is surface water flooding. There are approximately 3,900 people and 2,200 homes and businesses currently at risk of flooding. This is likely to increase to 5,500 people and 3,100 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 surface water management plan and sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description

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Avoid flood risk	551	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	552	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures
Prepare for flooding	553	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	554	Reduce the risk of surface water flooding in this target area

Action ID	Hillington and Cardonald		5501
Action Type	Flood scheme or works design		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to complete the Hillington and Cardonald surface water management preferred option detail design for Phase 3 of the works.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Renfrewshire Council, Scottish Water and SEPA.		

Action ID	Hillington and Cardonald		5502
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to implement surface water management phase 3 measures in Hillington and Cardonald.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Hillington and Cardonald		5503
Action Type	Community engagement		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Detailed design for surface water management options should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A Community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

Action ID	Hillington and Cardonald		5504
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Hillington and Cardonald		5505
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the surface water management measures should be carried out on an ongoing basis following construction. The performance of the surface water management measures should be monitored under any significant events.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.		

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Pollok (target area 56)

Local Flood Risk Management plan datasheet
Pollok **(Target Ref: *56*)**

Summary	Location Map
The suburban area of Pollok is located in south-west Glasgow. It is primarily in the Glasgow City Council area. The main source of flooding in Pollok is surface water flooding, however there is also a risk of river flooding. There are approximately 3,100 people at risk from flooding and approximately 1,800 homes and businesses. This is likely to increase to 3,900 people and 2,200 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 development of phase 3 of the White Cart Flood Protection Scheme and for surface water by the sewer flood risk assessment. Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description

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Avoid flood risk	561	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	562	Avoid an increase in flood risk by the appropriate management and maintenance of the Brock Burn & Levern Water Flood Protection Scheme 1991 and White Cart Flood Protection Scheme 2002
Prepare for flooding	563	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	564	Reduce the risk of surface water flooding in this target area

Action ID	Pollok		5601
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Study of Brock Burn and Levern Water Flood Protection Scheme 1991 and White Cart Flood Protection Scheme 2002.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Pollok		5602
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the Brock Burn and Levern Water Flood Protection Scheme 1991 and White Cart Flood Protection Scheme 2002 should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		

Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

Action ID	Pollok		5603
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Pollok		5604
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to develop a surface water management plan for this target area (including Nitshill and Priesthill). This should consider the outputs of Scottish Water's sewer flood risk assessment. Areas where surface water flooding interacts with river flooding should be identified. The potential for natural flood management should be investigated.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Pollok		5605
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the White Cart 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 maintain the White Cart flood warning scheme. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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Thornliebank (target area 57)

Local Flood Risk Management plan datasheet
Thornliebank **(Target Ref: *57*)**

Summary	Location Map
Thornliebank is a suburb in the south of Glasgow and located within the Glasgow City and East Renfrewshire Council areas. The main sources of flooding in Thornliebank are surface water and river flooding. There are approximately 2,100 people and 1,100 homes and businesses currently at risk from flooding. This is likely to increase to 2,900 people and 1,510 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 surface water management plan and the sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description

Avoid flood risk	571	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	572	Avoid an increase in flood risk by the appropriate management and maintenance of the White Cart Flood Protection Scheme
Prepare for flooding	573	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	574	Reduce the risk of surface water flooding in this target area

Action ID	Thornliebank		5701
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council to carry out a flood study to improve understanding of flood risk from the Brock Burn. If flood risk is confirmed, the study outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council and SEPA.		

Action ID	Thornliebank		5702
Action Type	Flood study (existing flood defences)		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The study should focus primarily on reviewing the performance of the White Cart Flood Protection Scheme phase 1 and 2.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.

Action ID	Thornliebank		5703
Action Type	Flood defence maintenance		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	Ongoing
Description	Maintenance to the White Cart Flood Protection Scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.		

Action ID	Thornliebank		5704
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Thornliebank	5705

Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The surface water management plan for Thornliebank, Scottish Water sewer flooding project should be reviewed to ascertain any more localised flood modelling requirements. The interactivity between surface water and river flooding should be assessed. If flood risk is confirmed, scoping of the next steps should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.		

Action ID	Thornliebank		5706
Action Type	Surface water management plan		
Action Delivery Lead	East Renfrewshire Council	Indicative Delivery	See delivery statement
Description	East Renfrewshire Council to review the outputs of the surface water management plan and Scottish Water sewer flooding project in the Thornliebank area. If flood risk is confirmed a scoping study should be carried out to identify the future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Renfrewshire Council in coordination with SEPA, Scottish Water and Glasgow City Council.		

Newton Mearns (target area 58)

Local Flood Risk Management plan datasheet
Newton Mearns **(Target Ref: *58*)**

Summary	Location Map
The suburban town of Newton Mearns is located south of Glasgow and within the East Renfrewshire Council area. The main source of flooding in Newton Mearns is surface water flooding, however there is also risks from river flooding. There is approximately 2,000 people at risk from flooding and approximately 920 homes and businesses. This is estimated to increase to 2,200 people and 1,100 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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

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Objective	ID	Description
Avoid flood risk	581	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	582	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	583	Reduce the risk of flooding in this target area

Action ID	Newton Mearns		5801
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Newton Mearns		5802
Action Type	Flood study		
Action Delivery Lead	East Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Building on from the surface water management plan and Scottish Water’s sewer flood risk assessment, East Renfrewshire Council should develop the understanding of current and future flood risk, including any interaction with river flooding. If flood risk is confirmed a scoping study should be carried out to identify the		

	future studies and works required that will achieve the Prepare, Avoid and Reduce objectives set.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is East Renfrewshire Council in coordination with Scottish Water and SEPA.

Action ID	Newton Mearns		5803
Action Type	Community engagement		
Action Delivery Lead	East Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Community engagement should be linked to the findings of the flood study.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is East Renfrewshire Council and coordination will be determined once the actions have been finalised.		

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Busby (target area 59)

Local Flood Risk Management plan datasheet
Busby **(Target Ref: *59*)**

Summary	Location Map
Busby is located south of Glasgow on the White Cart Water. The area is located primarily within East Renfrewshire Council area with small areas of Glasgow City and South Lanarkshire Councils. The main source of flooding in Busby is surface water flooding, however there is also a risk from river flooding. There are approximately 270 people and 150 homes and businesses at risk from flooding. This is estimated to increase to 300 people and 180 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

What is the Current understanding of Flood risk
This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by a sewer flood risk assessment. Together, this information has highlighted the risk of flooding in this area. Busby has therefore been identified as

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a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	591	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	592	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	593	Reduce the risk of flooding in this target area

Action ID	Busby		5901
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

East Kilbride west (target area 109)

Local Flood Risk Management plan datasheet
East Kilbride west **(Target Ref: *109*)**

Summary	Location Map
This covers the western area of East Kilbride, which is located south of Glasgow, within the South Lanarkshire Council area. The main source of flooding in East Kilbride west is surface water flooding, however there is also a risk from river flooding. There are approximately 1,600 people and 1,400 homes and businesses currently at risk from flooding. This is likely to increase to 2,200 people and 1,700 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 and the interactions between different flood sources by an integrated catchment study. There are periodic records of flooding in this target area.

Objective	ID	Description

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Avoid flood risk	1091	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1092	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1093	Reduce the risk of flooding in this target area

Action ID	East Kilbride west		10901
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Philipshill 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	East Kilbride west		10902
Action Type	Surface water management plan		
Action Delivery Lead	South Lanarkshire Council	Indicative Delivery	See delivery statement
Description	South Lanarkshire Council to develop a surface water management plan working with Scottish Water as appropriate, to gain an understanding of the hotspots of flooding and potential interaction with river flooding. The impacts of climate change on surface water flood risk should be considered. Where flood risk is confirmed, scoping of the flood protection options should be completed.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

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Plantation (target area 44001)

Local Flood Risk Management plan datasheet
Plantation **(Target Ref: *44001*)**

Summary	Location Map
Plantation is located in Glasgow, along the south bank of the River Clyde. It is in the Glasgow City Council area. The main source of flooding in the Plantation is surface water flooding, however there is also a risk of coastal flooding. There are approximately 3,400 people and 2,000 homes and businesses currently at risk from flooding. This is likely to increase to 5,000 people and 2,900 homes and businesses by 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 tidal Clyde model (December 2020) and surface water flooding by the sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	440011	Avoid inappropriate development that increases flood risk in this target area
Improve data and understanding	440012	Improve data and understanding of coastal flooding in this target area

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Prepare for flooding	440013	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	440014	Reduce the risk of surface water flooding in this target area

Action ID	Plantation		4400101
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.		

Action ID	Plantation		4400102
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dalmuir and Shieldhall sewer catchments 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Plantation		4400103
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

Action ID	Plantation		4400104
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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	Plantation	4400105
Action Type	Strategic mapping improvements	

Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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Pollokshields (target area 44002)

Local Flood Risk Management plan datasheet
Pollokshields **(Target Ref: *44002*)**

Summary	Location Map
Pollokshields is an area of south Glasgow and is within the Glasgow City Council area. The main source of flooding in Pollokshields is from surface water flooding, however there is also a risk of river flooding. There are approximately 5,300 people and 2,800 homes and businesses currently at risk from flooding. This is likely to increase to 8,500 people and 4,500 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and for river flooding by the tidal Clyde model (December 2020). Since 2015 this target area has not experienced significant rainfall events and there are therefore no recent records of flooding. This does not confirm that there is no flood risk.

Objective	ID	Description
Avoid flood risk	440021	Avoid inappropriate development that increases flood risk in this target area

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Prepare for flooding	440022	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	440023	Reduce the risk of flooding in this target area

Action ID	Pollokshields		4400201
Action Type	Flood study		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	Glasgow City Council and South Lanarkshire Council to develop an updated full flood model of the River Clyde following the outputs from the tidal Clyde and River Clyde models. The tidal Clyde model update outputs will be used to develop a programme to take forward key recommendations where funding permits.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.		

Action ID	Pollokshields		4400202
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Shieldhall 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Pollokshields		4400203
Action Type	Surface water management plan		
Action Delivery Lead	Glasgow City Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.		

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2.3.18 PVA 02/11/18 (Black Cart Water catchment - Lochwinnoch to Johnstone)

This area is designated as a potentially vulnerable area due to flood risk to Howwood, Kilbarchan and Paisley west. There is flooding from river, coastal and surface water. Recent flooding from surface and river water has occurred in the area.

There are 5 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

Johnstone and Linwood (target area 11)
Kilbarchan (target area 15)
Howwood (target area 40)
Lochwinnoch (target area 83)
Paisley west (target area 165)

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Johnstone and Linwood (target area 11)

Local Flood Risk Management plan datasheet
Johnstone and Linwood **(Target Ref: *11*)**

Summary	Location Map
The towns of Johnstone and Linwood are located on Black Cart Water, within the Renfrewshire Council area. The main source of flooding in the area is surface water flooding, however there is also a risk from river flooding. Flooding from the Black Cart Water is managed by the Collier Street Flood Prevention Scheme. There are approximately 3,400 people at risk from flooding and approximately 2,000 homes and businesses. This is likely to increase to 4,100 people and 2,400 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and integrated catchment study, which also assesses the interactions between the different flood sources. There are periodic records of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	111	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	112	Avoid an increase in flood risk by the appropriate management and maintenance of Collier Street Flood Protection Scheme 1999
Prepare for flooding	113	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	114	Reduce the risk of flooding in this target area

Action ID	Johnstone and Linwood		1101
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council to carry out a flood study in Johnstone to address flood risk from the Black Cart Water and tributaries. This should include a review of the performance of the Collier Street Flood Protection Scheme 1999.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with SEPA.		

Action ID	Johnstone and Linwood		1102
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Following on the outputs of Jonhstone flood study and surface water management plan, Renfrewshire Council should identify options to manage flood risk in Jonhstone.		

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Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

Action ID	Johnstone and Linwood		1103
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Johnstone and Linwood		1104
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in Jonhstone. The results of the integrated catchment study and sewer flood risk assessment should be considered. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

Action ID	Johnstone and Linwood		1105
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in Linwood. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.		

Action ID	Johnstone and Linwood		1106
Action Type	Flood defence maintenance		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Collier Street Flood Protection Scheme 1999 should continue and updates to the maintenance regime made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

Kilbarchan (target area 15)

Local Flood Risk Management plan datasheet
Kilbarchan **(Target Ref: *15*)**

Summary	Location Map
The village of Kilbarchan is located west of Glasgow. The area is located within the Renfrewshire Council area. The main sources of flooding in the area are river and surface water flooding. There are approximately 220 people at risk of flooding and around 120 homes and businesses. This is likely to increase to 270 people and 150 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and integrated catchment study, which also assesses the interactions between the different flood sources. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	151	Avoid inappropriate development that increases flood risk in this target area

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Prepare for flooding	152	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	153	Reduce the risk of flooding in this target area

Action ID	Kilbarchan		1501
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Kilbarchan		1502
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in this target area. The results of the integrated catchment study and sewer flood risk assessment should be considered. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

Action ID	Kilbarchan		1503
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council to carry out a natural flood management study to further investigate the potential benefit for sediment management at Kilbarchan.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Kilbarchan		1504
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council to carry out a flood study to address risk from the Kilbarchan Burn.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Kilbarchan 1505
Action Type	Flood study (options appraisal)

Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Following on the outputs of Kilbarchan Burn flood study, natural flood management study and surface water management plan, Renfrewshire Council should identify options to manage flood risk in Kilbarchan.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

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Howwood (target area 40)

Local Flood Risk Management plan datasheet
Howwood **(Target Ref: *40*)**

Summary	Location Map
The village of Howwood is situated on the banks of Black Cart Water and located within the Renfrewshire Council area. The main source of flooding in Howwood is surface water flooding. There is approximately 110 people and 60 homes and businesses currently at risk of flooding. This is likely to increase to 130 people and 70 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

What is the Current understanding of Flood risk
This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this area. Howwood has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	401	Avoid inappropriate development that increases flood risk in Howwood
Improve data and understanding	402	Improve data and understanding of surface water flooding in Howwood

Action ID	Howwood		4001
Action Type	Data collection		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	On completion of the integrated catchment study and assessment of sewer flood risk, Renfrewshire Council should review the findings to ascertain if further action is required to improve understanding of risk from both river and surface water. This may include data collection and monitoring to improve the confidence in flood sources, mechanisms and risk.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with SEPA to take forward opportunities for joint data collection activities.		

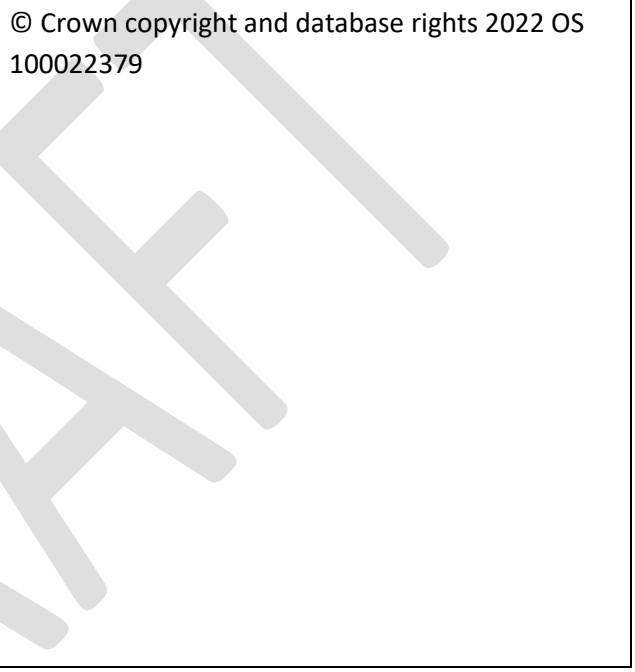
Action ID	Howwood		4002
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine sewer catchment in this 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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Lochwinnoch (target area 83)

Local Flood Risk Management plan datasheet
Lochwinnoch **(Target Ref: *83*)**

Summary	Location Map
Lochwinnoch is a village located on the banks of the Castle Semple Loch and Barr Loch and the River Calder within the Renfrewshire Council area. The main source of flooding in Lochwinnoch is river flooding, however there is also risk from surface water flooding. There are approximately 380 people and 220 properties currently at risk from flooding. This is likely to increase to 610 people and 340 properties 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 flooding by the sewer flood risk assessment. There is a long record of flooding in this target area with impacts to the A760.

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Objective	ID	Description
Avoid flood risk	831	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	832	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	833	Reduce the risk of flooding in this target area

Action ID	Lochwinnoch		8301
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council to carry out a flood study to address risk from the River Calder and tributaries.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Lochwinnoch		8302
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council to carry out a natural flood management study that will focus on the potential benefit natural flood management actions may have on the River Calder Burn catchment.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Lochwinnoch		8303
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Following on the outputs of River Calder flood study and natural flood management study, Renfrewshire Council should identify options to manage flood risk in Lochwinnoch.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

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Paisley west (target area 165)

Local Flood Risk Management plan datasheet
Paisley west **(Target Ref: *165*)**

Summary	Location Map
Paisley west covers the western area of the town of Paisley, which is located to the west of Glasgow and is within the Renfrewshire Council area. The main source of flooding in Paisley west is river flooding, however there is also a risk of surface water flooding. There are around 4,500 people and 2,500 homes and businesses at risk from flooding. This is likely to increase to 5,400 people and 3,000 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1651	Avoid inappropriate development that increases flood risk in this target area
Prepare for flooding	1652	Prepare for current flood risk and future flooding as a result of climate change in this target area

Reduce flood risk	1653	Reduce the risk of flooding in this target area

Action ID	Paisley west		16501
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2024-2026
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Laighpark Paisley 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Paisley west		16502
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in this target area. The results of the integrated catchment study and sewer flood risk assessment should be considered. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.		

Action ID	Paisley west		16503
Action Type	Flood study		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council to carry out a flood study to address risk from the Candren Burn and interactivity with surface water flooding.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with SEPA.		

Action ID	Paisley west		16504
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA should investigate a potential extension to the White Cart flood warning scheme to include this area.		
Funding	SEPA's role in this action is funded by Scottish Government through SEPA's grant in aid settlement.		
Coordination	SEPA will work with Renfrewshire Council on the potential to coordinate flood warning development with the flood study investigation. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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2.3.19 PVA 02/11/19 (Gryfe catchment)

This area is designated as a potentially vulnerable area due to flood risk to Bridge of Weir, Houston and Crosslee, Kilmacolm and Quarrier's Village. The main sources of flooding are from surface water and from the River Gryfe and tributaries. Recent flooding has occurred in the area.

There are 4 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

Houston and Crosslee (target area 65)
Quarrier's Village (target area 99)
Kilmacolm (target area 113)
Bridge of Weir (target area 65001)

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Houston and Crosslee (target area 65)

Local Flood Risk Management plan datasheet
Houston and Crosslee **(Target Ref: *65*)**

Summary	Location Map
Houston, Crosslee and Craigends are villages located on the banks of the River Gryfe. They are located within the Renfrewshire Council area. The main source of flooding in Houston and Crosslee is river flooding, however there is also risk from surface water flooding. Flooding from the River Gryfe is managed by the Crosslee Flood Prevention Scheme (2001). There are approximately 390 people and 210 homes and businesses currently at risk from flooding. This is likely to increase to 490 people and 260 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

What is the Current understanding of Flood risk
This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this area. Houston and Crosslee has therefore been identified as a new target area for

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the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	651	Avoid inappropriate development that increases flood risk in this target area
Avoid flood risk	652	Avoid an increase in flood risk by the appropriate management and maintenance of Crosslee Flood Protection Scheme 2001
Improve data and understanding	653	Improve data and understanding of surface water and river flooding in this target area

Action ID	Houston and Crosslee		6501
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Houston and Crosslee		6502
Action Type	Data collection		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement

Description	On completion of the assessment of sewer flood risk, Renfrewshire Council should review the findings to ascertain if further action is required to improve understanding of risk from both river and surface water. This may include data collection and monitoring to improve the confidence in flood sources, mechanisms and risk.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Renfrewshire Council in coordination with SEPA to take forward opportunities for joint data collection activities.

Action ID	Houston and Crosslee		6503
Action Type	Adaptation plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Crosslee Flood Protection Scheme 2001 adaptation plan.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.		

Action ID	Houston and Crosslee		6504
Action Type	Flood defence maintenance		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	Ongoing
Description	Maintenance to the Crosslee Flood Protection Scheme 2001 should continue and updates to the maintenance regime made based on the adaptation plan.		
Funding	Revenue funding		

Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

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Quarrier's Village (target area 99)

Local Flood Risk Management plan datasheet
Quarrier's Village **(Target Ref: *99*)**

Summary	Location Map
Quarrier's Village is a small village, which lies just west of Glasgow on the River Gryfe. The area is located within the Inverclyde Council area. The main source of flooding in Quarrier's Village is surface water flooding, however there is also a risk of river flooding. There are approximately 170 people and 120 homes and businesses currently at risk from flooding. This is likely to increase to 200 people and 140 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by the Inverclyde Flood Management Study (2013) and the development of the Inverclyde Flood Protection Works (2016). Understanding is also improving for

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surface water as a result of the sewer flood risk assessment. There are limited records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	991	Avoid inappropriate development that increases flood risk in Quarrier's Village
Prepare for flooding	992	Prepare for current flood risk and future flooding as a result of climate change in Quarrier's Village
Reduce flood risk	993	Reduce the risk of flooding from the Gotter Water in Quarrier's Village

Action ID	Quarrier's Village		9901
Action Type	Flood scheme or works design		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	The development of the Gotter Water Flood Protection Scheme should continue to the detailed design stage.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.		

Action ID	Quarrier's Village		9902
Action Type	Community engagement		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Detailed design for the Gotter Water Flood Protection Scheme should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to		

	cover the time period from detailed design to implementation of the preferred flood risk management option.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

Action ID	Quarrier's Village		9903
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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 strategic planning commitments.		
Funding	Funding for this action is secured within Scottish Water's business plan		
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

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Kilmacolm (target area 113)

Local Flood Risk Management plan datasheet
Kilmacolm **(Target Ref: *113*)**

Summary	Location Map
Kilmacolm is a village located in Inverclyde Council area, located west of Glasgow. The main source of flooding in Kilmacolm is surface water flooding, however there is also risk from river flooding. There are approximately 270 people and 160 homes and businesses currently at risk from flooding. This is likely to increase to 350 people and 200 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by the Inverclyde Flood Management Study (2013) and the development of the Inverclyde Flood Protection Works (2016). Understanding is also improving for surface water as a result of the sewer flood risk assessment. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1131	Avoid inappropriate development that increases flood risk in Kilmacolm

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Prepare for flooding	1132	Prepare for current flood risk and future flooding as a result of climate change in Kilmacolm
Reduce flood risk	1133	Reduce the risk of surface water flooding in Kilmacolm
Reduce flood risk	1134	Reduce the risk of flooding from the Glenmosston Burn in Kilmacolm

Action ID	Kilmacolm		11301
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	The local authority to develop a surface water management plan working with Scottish Water as appropriate, to gain an understanding of the hotspots of flooding and potential interaction with river flooding.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.		

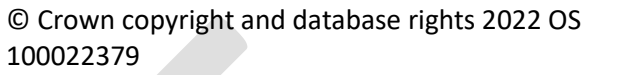
Action ID	Kilmacolm		11302
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine sewer catchment in this 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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Bridge of Weir (target area 65001)

Local Flood Risk Management plan datasheet
Bridge of Weir **(Target Ref: *65001*)**

Summary	Location Map
Bridge of Weir is a village located within the Renfrewshire Council area, just west of Glasgow on the banks of the River Gryfe. The main source of flooding in Bridge of Weir is surface water flooding, however there is also a river flood risk. There are approximately 170 people and 100 homes and businesses currently at risk from flooding. This is likely to increase to 200 people and 120 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, and this information has highlighted the risk of flooding in this area. Bridge of Weir has therefore been identified as a new target area for the 2021 flood risk management plans. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	650011	Avoid inappropriate development that increases flood risk in Bridge of Weir

Improve data and understanding	650012	Improve data and understanding of surface water flooding in Bridge of Weir

Action ID	Bridge of Weir		6500101
Action Type	Data collection		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	On completion of the assessment of sewer flood risk, Renfrewshire Council should review the findings to ascertain if further action is required to improve understanding of risk from both river and surface water. This may include data collection and monitoring to improve the confidence in flood sources, mechanisms and risk.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with SEPA to take forward joint data collection activities.		

Action ID	Bridge of Weir		6500102
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

2.3.20 PVA 02/11/20 (Clyde South and Bishopton)

This area is designated as a potentially vulnerable area due to flood risk to Bishopton, Erskine, Inchinnan and Port Glasgow east. The main sources of flooding are from river and surface water. Recent flooding has occurred in the area.

There are 4 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.

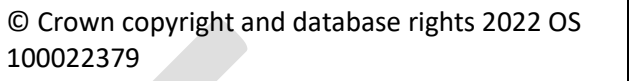
List of target areas

Bishopton (target area 6)
Inchinnan (target area 66)
Port Glasgow east (target area 89)
Erskine (target area 110)

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Bishopton (target area 6)

Local Flood Risk Management plan datasheet
Bishopton **(Target Ref: *6*)**

Summary	Location Map
The village of Bishopton is located within the Renfrewshire Council area. The main source of flooding is surface water flooding, however there is also a risk of river flooding. There are approximately 400 people at risk from flooding and approximately 220 homes and businesses. This is likely to increase to 530 people and 290 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 flooding by the sewer flood risk assessment and integrated catchment study, which also assesses the interactions between the different flood sources. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	61	Avoid inappropriate development that increases flood risk in this target area

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Improve data and understanding	62	Improve data and understanding of surface water and river flooding in this target area

Action ID	Bishopton		601
Action Type	Data collection		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	On completion of the integrated catchment study and assessment of sewer flood risk, Renfrewshire Council should review the findings to ascertain if further action is required to improve understanding of risk from both river and surface water. This may include data collection and monitoring to improve the confidence in flood sources, mechanisms and risk.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with SEPA to take forward opportunities for joint data collection activities.		

Action ID	Bishopton		602
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Bishopton		603
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in this target area. The results of the integrated catchment study and sewer flood risk assessment should be considered. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.		

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Inchinnan (target area 66)

Local Flood Risk Management plan datasheet
Inchinnan **(Target Ref: *66*)**

Summary	Location Map
The village of Inchinnan is located west of Glasgow, near to the banks of the Black Cart Water within the Renfrewshire Council area. The main source of flooding in Inchinnan is surface water flooding. There are approximately 70 people and 70 homes and businesses currently at risk of flooding. This is likely to increase to 80 people and 80 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 sewer flood risk assessment and integrated catchment study, which also assesses the interactions between the different flood sources. There are periodic records of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	661	Avoid inappropriate development that increases flood risk in Inchinnan
Prepare for flooding	662	Prepare for current flood risk and future flooding as a result of climate change in Inchinnan
Reduce flood risk	663	Reduce the risk of surface water flooding in Inchinnan

Action ID	Inchinnan		6601
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Inchinnan		6602
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in this target area. The results of sewer flood risk assessment should be considered. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

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Port Glasgow east (target area 89)

Local Flood Risk Management plan datasheet
Port Glasgow east **(Target Ref: *89*)**

Summary	Location Map
Port Glasgow east is located on the south bank of the River Clyde. The area is located within the Inverclyde Council area. The main source of flooding in Port Glasgow East is surface water flooding. There are approximately 760 people and 430 homes and businesses currently at risk of flooding. This is likely to increase to 990 people and 550 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 understanding of flood risk is improving as a result of the integrated catchment study which assesses the interactions between the different flood sources. There are limited records flooding in this target area.

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Objective	ID	Description
Avoid flood risk	891	Avoid inappropriate development that increases flood risk in Port Glasgow
Prepare for flooding	892	Prepare for current flood risk and future flooding as a result of climate change in Port Glasgow
Reduce flood risk	893	Reduce the risk of surface water flooding in Port Glasgow

Action ID	Port Glasgow east		8901
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	The hotspot areas identified from the integrated catchment study should be considered with options developed to look at reducing the flood risk. This will form part of a surface water management plan which would investigate the long term flood management in key areas.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.		

Action ID	Port Glasgow east		8902
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Inverclyde 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Port Glasgow east		8903
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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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Erskine (target area 110)

Local Flood Risk Management plan datasheet
Erskine **(Target Ref: *110*)**

Summary	Location Map
Erskine is a town located west of Glasgow on the banks of the River Clyde within the Renfrewshire Council area. The main source of flooding in Erskine is surface water flooding. There are approximately 1,100 people and 560 homes and businesses currently at risk of flooding. This is likely to increase to 1,300 people and 670 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 flooding by the sewer flood risk assessment and integrated catchment study, which also assesses the interactions between the different flood sources. There are periodic records of flooding in this target area.

Objective	ID	Description
Avoid flood risk	1101	Avoid inappropriate development that increases flood risk in this target area

Prepare for flooding	1102	Prepare for current flood risk and future flooding as a result of climate change in this target area
Reduce flood risk	1103	Reduce the risk of surface water flooding in this target area

Action ID	Erskine		11001
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Erskine 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Erskine		11002
Action Type	Surface water management plan		
Action Delivery Lead	Renfrewshire Council	Indicative Delivery	See delivery statement
Description	Renfrewshire Council should develop a surface water management plan in this target area. The results of the integrated catchment study and sewer flood risk assessment should be considered. The surface water management plan should identify the future studies and works required to manage current and future flood risk and be reviewed regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		

Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

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2.3.21 PVA 02/11/21 (Greenock and Gourock)

This area is designated as a potentially vulnerable area due to flood risk to Gourock, Greenock, Inverkip and Port Glasgow west. There is flooding from coastal, river and surface water. Recent flooding has occurred as a result of surface water.

There are 4 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

Greenock (target area 64)
Port Glasgow west (target area 90)
Gourock (target area 117)
Inverkip (target area 146)

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Greenock (target area 64)

Local Flood Risk Management plan datasheet
Greenock **(Target Ref: *64*)**

Summary	Location Map
The town of Greenock is located on the south bank of the Firth of Clyde, within Inverclyde Council area. The main source of flooding in the town of Greenock is surface water flooding, however there are also risks of river and coastal flooding. There are around 4,300 people and 2,700 homes and businesses currently at risk of flooding. This is likely to increase to 5,300 people and 3,200 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by the Inverclyde Flood Management Study (2013) and the development of the Inverclyde Flood Protection Scheme (2015). Understanding is also improving as a result of the integrated catchment study which assesses the interactions between

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the different flood sources and is improved for coastal flooding by the flood warning scheme. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	641	Avoid an increase in flood risk by the appropriate management and maintenance of Greenock Reservoirs flood protection scheme
Avoid flood risk	642	Avoid inappropriate development that increases flood risk in Greenock
Prepare for flooding	643	Prepare for current flood risk and future flooding as a result of climate change in Greenock
Reduce flood risk	644	Reduce the risk of flooding in Greenock

Action ID	Greenock		6401
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	The hotspot areas identified from the integrated catchment study should be considered with options developed to look at reducing the flood risk. The impacts of climate change on flood risk should be assessed. This will form part of a surface water management plan which should investigate the long term flood management in key areas.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.		

Action ID	Greenock	6402
Action Type	Flood study (existing flood defences)	

Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Study of Greenock Reservoirs flood protection scheme to be developed following the outcomes of the surface water management plan.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.		

Action ID	Greenock		6403
Action Type	Flood defence maintenance		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	Ongoing
Description	Maintenance to the Greenock Reservoirs flood protection scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Revenue funding		
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.		

Action ID	Greenock		6404
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Inverclyde 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Action ID	Greenock		6405
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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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Port Glasgow west (target area 90)

Local Flood Risk Management plan datasheet
Port Glasgow west **(Target Ref: *90*)**

Summary	Location Map
The western area of Port Glasgow is located on the south bank of the River Clyde. The area is located within the Inverclyde Council area. The main source of flooding in Port Glasgow west is surface water flooding, however there are also risks from river and coastal flooding. There are approximately 1,200 people and 660 homes and businesses currently at risk of flooding. This is likely to increase to 1,400 people and 790 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 flood risk by the Inverclyde Flood Management Study (2013) and the development of the Inverclyde Flood Protection Works (2016). Understanding is also improving as a result of the integrated catchment study which assesses the interactions between

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the different flood sources. Understanding is also improved for coastal flooding by the flood warning scheme. There is a long record of flooding in this target area.

Objective	ID	Description
Avoid flood risk	901	Avoid inappropriate development that increases flood risk in Port Glasgow
Prepare for flooding	902	Prepare for current flood risk and future flooding as a result of climate change in Port Glasgow
Reduce flood risk	903	Reduce the risk of flooding in Port Glasgow

Action ID	Port Glasgow west		9001
Action Type	Flood scheme or works design		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Inverclyde Council to develop detail design for Phase 2 of the Bouverie Burn Flood Protection Scheme. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.		

Action ID	Port Glasgow west		9002
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	The local flood risk management plans published in December 2022 will establish further detail on the actions.		

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Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.

Action ID	Port Glasgow west		9003
Action Type	Community engagement		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Detailed design and implementation of the Bouverie Burn Flood Protection Scheme should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.		

Action ID	Port Glasgow west		9004
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	The hotspot areas identified from the integrated catchment study should be considered with options developed to look at reducing the flood risk.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.		

Action ID	Port Glasgow west		9005
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Inverclyde 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Port Glasgow west		9006
Action Type	Flood defence maintenance		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	Ongoing
Description	Maintenance of the coastal flood defences in the area.		
Funding	Revenue funding		
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.		

Action ID	Port Glasgow west		9007
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028

Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.
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.

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Gourock (target area 117)

Local Flood Risk Management plan datasheet
Gourock **(Target Ref: *117*)**

Summary	Location Map
Gourock is located on the south bank of the Firth of Clyde and is within the Inverclyde Council area. The main sources of flooding associated with Gourock are coastal and surface water flooding, however there is also a risk from river flooding. There are approximately 1,200 people and 630 homes and businesses currently at risk from flooding. This is likely to increase to 1,600 people and 840 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Cove Road, Gourock Flood Protection Feasibility Study (2004) has underpinned the understanding of coastal flood risk in this area and the national level assessment is also improved for river flood risk by the Inverclyde Flood Management Study (2013) and the development of the Inverclyde Flood Protection Works (2016). Understanding is also improving as a result of the integrated catchment study which assesses the interactions between the different flood sources. Understanding is also improved for coastal flooding by the flood warning scheme. There is a long record of flooding in this target area.

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Objective	ID	Description
Avoid flood risk	1171	Avoid inappropriate development that increases flood risk in Gourock
Prepare for flooding	1172	Prepare for current flood risk and future flooding as a result of climate change in Gourock
Reduce flood risk	1173	Reduce the risk of flooding in Gourock

Action ID	Gourock		11701
Action Type	Flood scheme or works design		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Inverclyde Council to develop detail design of preferred option for managing coastal flood risk in Coves Road. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.		

Action ID	Gourock		11702
Action Type	Community engagement		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Detailed design for Coves Road should be carried out in conjunction with community engagement where issues, constraints, aspirations and opportunities are identified. A community engagement plan should be created to cover the time period from detailed design to implementation of the preferred flood risk management option.		

Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

Action ID	Gourock		11703
Action Type	Flood study		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Inverclyde Council to carry out a flood study to address risk from the Coves Burn. The potential for catchment management should be assessed incorporating Natural Flood Management actions where suitable.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.		

Action ID	Gourock		11704
Action Type	Flood study (options appraisal)		
Action Delivery Lead	Inverclyde Council	Indicative Delivery	See delivery statement
Description	Inverclyde Council to continue developing the surface water management plan for Gourock and the wider area. The hotspot areas identified from the integrated catchment study should be considered with options developed to look at reducing the flood risk.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.		

Action ID	Gourock		11705
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Inverclyde 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Gourock		11706
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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	Gourock	11707

Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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Inverkip (target area 146)

Local Flood Risk Management plan datasheet
Inverkip **(Target Ref: *146*)**

Summary	Location Map
Inverkip is a village located on the east shore of the Firth of Clyde. The area is located within the Inverclyde Council area. The main source of flooding in Inverkip is surface water flooding, however there are also risks from river and coastal flooding. There are approximately 140 people and 100 homes and businesses currently at risk from flooding. This is likely to increase to 180 people and 120 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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, and this information has highlighted the risk of flooding in this target area. There are no records of flooding in the Inverkip area but this does not confirm that there is no flood risk. 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.

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Objective	ID	Description
Avoid flood risk	1461	Avoid inappropriate development that increases flood risk in Inverkip
Prepare for flooding	1462	Prepare for current flood risk and future flooding as a result of climate change in Inverkip
Reduce flood risk	1463	Reduce the risk of flooding in Inverkip

Action ID	Inverkip		14601
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2025-2027
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Inverclyde 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	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.		

Action ID	Inverkip		14602
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2025-2028
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		

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.

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2.3.22 PVA 02/11/22 (Dunoon)

This area is designated as a potentially vulnerable area principally due to flood risk to Dunoon and Sandbank. There is flooding from coastal, river and surface water. Coastal flood risk is likely to increase due to sea level rise caused by climate change. Recent coastal flooding has occurred in the area.

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

Sandbank (target area 100)
Dunoon (target area 107)

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Sandbank (target area 100)

Local Flood Risk Management plan datasheet
Sandbank **(Target Ref: *100*)**

Summary	Location Map
Sandbank is situated on the Cowal Peninsula and is within the Argyll and Bute Council area. The main source of flooding in Sandbank is coastal flooding, however there is also risk of surface water flooding. There are approximately 160 people and 110 homes and businesses currently at risk from flooding. This is likely to increase to 260 people and 180 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Dunoon Surface Water Management Plan which identified a number of different areas for mitigating flood risk including Sandhaven, Sandbank. There are records of periodic coastal and surface water flooding in Sandbank.

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Objective	ID	Description
Avoid flood risk	1001	Avoid inappropriate development that increases flood risk in Sandbank
Prepare for flooding	1002	Prepare for current flood risk and future flooding as a result of climate change in Sandbank
Reduce flood risk	1003	Reduce the risk of surface water flooding in Sandbank

Action ID	Sandbank		10001
Action Type	Flood scheme or works design		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Further development of the preferred option may be required prior to commencing with the detailed design. Argyll and Bute Council to develop the detailed design of the flood protection works in Sandhaven, Sandbank based on the preferred option from the surface water management plan. The preferred option identified to mitigate surface water flooding is a small embankment with discharge to open channel. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and landowners.		

Action ID	Sandbank		10002
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Progress the flood works based on the detailed design.		

	The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water, SEPA and landowners.

Action ID	Sandbank		10003
Action Type	Community engagement		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Ongoing
Description	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of the flood protection works.		
Funding	Revenue		
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water, Community Council and land / property owners.		

Action ID	Sandbank		10004
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2023-2025
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dunoon 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	Sandbank		10005
Action Type	Surface water management plan		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Implement the surface water management plan. The plan should be reviewed and updated regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and landowners.		

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Dunoon (target area 107)

Local Flood Risk Management plan datasheet
Dunoon **(Target Ref: *107*)**

Summary	Location Map
Dunoon is located on the Cowal Peninsula and is within the Argyll and Bute Council area. The main sources of flooding in Dunoon are surface water and river flooding. There are approximately 700 people and 430 homes and businesses at risk from flooding. This is estimated to increase to 970 people and 590 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 Dunoon Surface Water Management Plan. A sewer flood risk assessment has also been completed. The national level assessment is underpinned by the various studies to develop the Milton Burn Flood Protection Scheme (2012) and the Kilbride Road, Dunoon Flood Protection Scheme (2007). There is a long history of surface water flooding in Dunoon. There are also records of flooding from the Milton Burn prior to the completion of the Milton Burn Flood Protection Scheme including flooding in November 2001 and August 2004.

Objective	ID	Description

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Avoid flood risk	1071	Avoid an increase in flood risk by the appropriate management and maintenance of the Kilbride Road, Dunoon Flood Prevention Scheme 2007 and the Milton Burn scheme
Avoid flood risk	1072	Avoid inappropriate development that increases flood risk in Dunoon
Improve data and understanding	1073	Improve data and understanding of the performance of the flood protection asset in Dunoon
Improve data and understanding	1074	Improve data and understanding of the risk of flooding from the Milton Burn in Dunoon
Prepare for flooding	1075	Prepare for current flood risk and future flooding as a result of climate change in Dunoon
Reduce flood risk	1076	Reduce the risk of surface water flooding in Dunoon

Action ID	Dunoon		10701
Action Type	Flood scheme or works design		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Further development of the preferred option may be required prior to commencing with the detailed design. Argyll and Bute Council to develop the detailed design of the flood protection works in Black Park (Ash Park), Dunoon based on the preferred option from the surface water management plan. The preferred option identified to mitigate flooding is a filtration trench discharging to the combined sewer. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with Scottish Water, land / property owners and the Community Council.		

Action ID	Dunoon		10702
Action Type	Flood scheme or works implementation		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Argyll and Bute Council to progress the flood works based on the detailed design. The responsible authority proposes this action as the best viable option for managing flood risk in this community. The delivery of this action is subject to capital funding being made available.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with Scottish Water, SEPA, land / property owners and the Community Council.		

Action ID	Dunoon		10703
Action Type	Community engagement		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Ongoing
Description	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of the flood protection works.		
Funding	Revenue		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with Scottish Water, land / property owners and the Community Council.		

Action ID	Dunoon	10704
Action Type	Flood study	

Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Argyll and Bute Council to carry out a flood study to address flood risk from the Milton Burn in Dunoon. This includes a review of the Milton Burn Flood Protection Scheme (2012) and Kilbride Road, Dunoon Flood Prevention Scheme (2007). The impacts of climate change on flood risk should be evaluated. If flood risk is confirmed, scoping of the next steps should be completed.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council who will coordinate with SEPA.		

Action ID	Dunoon		10705
Action Type	Flood defence maintenance		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Ongoing
Description	Continue to maintain the Milton Burn Flood Protection Scheme (2012), Kilbride Road, Dunoon Flood Prevention Scheme (2007) and other existing flood defences in Dunoon.		
Funding	Revenue funding		
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.		

Action ID	Dunoon		10706
Action Type	Sewer flood risk assessment		
Action Delivery Lead	Scottish Water	Indicative Delivery	2023-2025
Description	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes Dunoon 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	Dunoon		10707
Action Type	Surface water management plan		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	Argyll and Bute Council to implement the surface water management plan. The plan should be reviewed and updated regularly.		
Funding	Confirmation of funding awaited from Scottish Government and COSLA.		
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.		

Action ID	Dunoon		10708
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 maintain the Firth of Clyde coastal flood warning scheme. SEPA will continue to raise awareness of flood warning, and engage with communities about the service when required.		

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2.3.23 PVA 02/11/23 (Isle of Bute)

This area is designated as a potentially vulnerable area due to flood risk to Kilchattan Bay, Rothesay and Port Bannatyne. There is flooding from coastal, river and surface water. This area has a history of flooding, with recent floods being caused by both river and surface water 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

Rothesay and Port Bannatyne (target area 88)
Kilchattan Bay (target area 116)

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Rothesay and Port Bannatyne (target area 88)

Local Flood Risk Management plan datasheet
Rothesay and Port Bannatyne **(Target Ref: *88*)**

Summary	Location Map
Rothesay and Port Bannatyne are located on the east of the Isle of Bute in the Argyll and Bute Council area. The main source of flooding is coastal, however there are also risks from river and surface water. The national level assessment estimates that there are approximately 1,500 people and 1,000 homes and businesses at risk from flooding. This does not take account of the Rothesay Flood Protection Scheme and as a result the numbers could be overestimated. The number of people, homes and businesses at risk is expected to increase by approximately 30% by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 coastal flood

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risk in Rothesay through the previous studies to support the development of the Rothesay Flood Protection Scheme which was constructed in 2004. The understanding of coastal flooding is also improved by the development and operation of the Firth of Clyde flood warning scheme and the Rothesay and Port Bannatyne communities benefit from the Kames Bay to Rothesay flood warning area. The understanding of surface water flood risk in Rothesay is improved by a sewer flood risk assessment. Prior to the completion of the Rothesay Flood Protection Scheme there were records of periodic coastal flooding in Rothesay including notable flooding in January 1991. There are records of coastal flooding in the wider target area too. Records show that flooding can be exacerbated when heavy rainfall coincides with a high tide, as seen during the flooding of October 2018.

Objective	ID	Description
Avoid flood risk	881	Avoid inappropriate development that increases flood risk in Rothesay and Port Bannatyne
Avoid flood risk	882	Avoid an increase in flood risk by the appropriate management and maintenance of the Rothesay Flood Prevention Scheme 2002
Improve data and understanding	883	Improve data and understanding of coastal and surface water flooding in Rothesay and Port Bannatyne including the Rothesay Flood Protection Scheme
Prepare for flooding	884	Prepare for current flood risk and future flooding as a result of climate change in Rothesay and Port Bannatyne

Action ID	Rothesay and Port Bannatyne		8801
Action Type	Flood study		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	See delivery statement
Description	A flood study should be carried out to address coastal and surface water flood risk in Rothesay and Port Bannatyne. Using the best understanding of current coastal processes and anticipated		

	changes due to climate change, flood modelling should be undertaken to review the standard of protection offered by the coastal defences. Surface water flood modelling should also be progressed and include the Lade area. The impacts of climate change on flood risk should be evaluated. The interactivity between coastal flooding and surface water flooding should be assessed. If flood risk is confirmed, scoping of the next steps should be completed.
Funding	Confirmation of funding awaited from Scottish Government and COSLA.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with SEPA.

Action ID	Rothesay and Port Bannatyne		8802
Action Type	Flood defence maintenance		
Action Delivery Lead	Argyll and Bute Council	Indicative Delivery	Ongoing
Description	Maintenance to the Rothesay Flood Protection Scheme should continue and updates to the maintenance regime be made based on the findings of the flood study.		
Funding	Capital/ Revenue plus any available external funding		
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.		

Action ID	Rothesay and Port Bannatyne		8803
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2023-2026
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with		

	improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.
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	Rothesay and Port Bannatyne		8804
Action Type	Flood warning maintenance		
Action Delivery Lead	SEPA	Indicative Delivery	Ongoing
Description	SEPA should maintain the Firth of Clyde 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 the flood schemes and studies along the Firth of Clyde 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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Kilchattan Bay (target area 116)

Local Flood Risk Management plan datasheet
Kilchattan Bay **(Target Ref: *116*)**

Summary	Location Map
Kilchattan Bay is located on the southern end of the Isle of Bute in the Argyll and Bute Council area. The only source of flooding in Kilchattan Bay is coastal flooding. There are approximately 110 people and 60 homes and businesses currently at risk from flooding, which is a significant proportion of the community. This is likely to increase to 120 people and 70 homes and businesses by the 2080s due to climate change.	© Crown copyright and database rights 2022 OS 100022379

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 coastal flooding in this target area. The risk is also expected to increase due to climate change. Kilchattan Bay has therefore been identified as a new target area for the 2021 flood risk management plans. There are no records of flooding in the Kilchattan Bay target area but this does not confirm that there is no flood risk. 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.

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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	1161	Avoid inappropriate development that increases flood risk in Kilchattan Bay
Improve data and understanding	1162	Improve data and understanding of coastal flooding and the impacts of climate change in Kilchattan Bay
Prepare for flooding	1163	Prepare for current flood risk and future flooding as a result of climate change in Kilchattan Bay

Action ID	Kilchattan Bay		11601
Action Type	Strategic mapping improvements		
Action Delivery Lead	SEPA	Indicative Delivery	2023-2026
Description	SEPA will be undertaking a review of coastal flood modelling in this target area to identify where it may be appropriate to include the impact of waves on coastal flooding. We will progress with improved flood modelling and mapping in the highest priority areas taking account of availability of data to support the modelling work.		
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.		

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