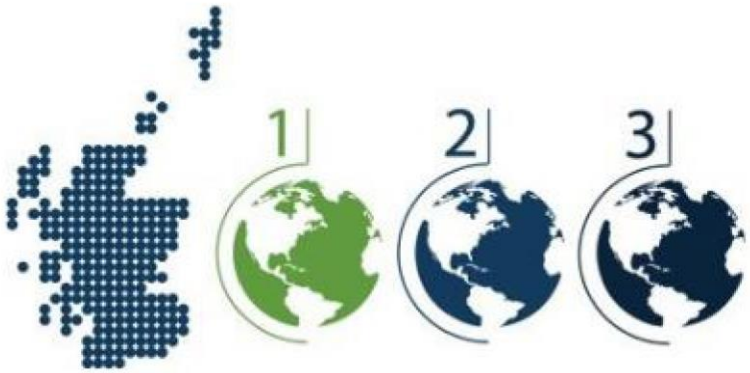
Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

Clyde and Loch Lomond Local Plan District (LPD 11)

Draft flood risk management plans 2022-2028

Every day SEPA works to protect and enhance Scotland's environment, helping communities and businesses thrive within the resources of our planet.

We call this **One Planet Prosperity**



For information on accessing this document in an alternative format or language please contact SEPA by email at equalities@sepa.org.uk

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

http://contactscotland-bsl.org/

This document has been produced in collaboration with:

www.sepa.org.uk

07747 627671

If you wish to post your comments, please mark them for the attention of FRM consultation and send them to:

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

Clyde and Loch Lomond Local Plan District (LPD 11)

Draft flood risk management plans 2022-2028

The Clyde & Loch Lomond Local Plan District covers an area of around 4,800km² and has a population of approximately 1.9 million. It extends from Loch Lomond in the north to the Lowther Hills in the south and includes part of Loch Lomond and the Trossachs National Park. The coastline is around 500km long, from Ardlamont Point to Largs, encompassing the Firth of Clyde including the Isle of Bute. It includes the urban areas of Glasgow City, Dumbarton, East Kilbride, Motherwell, Paisley, Hamilton, Bishopbriggs and Greenock.

The area contains the River Clyde and its many tributaries and is heavily urbanised. However outside of the urbanised areas the main land covers are agricultural grazing lands, coniferous and broadleaved woodland. There are many lochs and reservoirs in the area including Loch Lomond, Loch Eck, Loch Arklet and Daer Reservoir.

There is river, surface water and coastal flood risk in the Local Plan District, with the main risk coming from surface water flooding. There have been several large floods, notably from intense rainfall and river flooding in December 2015 as a result of Storm Desmond and Storm Frank. In November 2018 Storm Diana caused coastal and river flooding, affecting many areas. More recently, Storm Ciara followed swiftly by Storm Dennis in February 2020 caused coastal, river and surface water flooding across the Local Plan District.

Currently it is estimated there are around 170,000 people and 98,000 homes and businesses at risk from flooding. This may increase to 220,000 people and 130,000 homes and businesses by the 2080s due to climate change. The expected annual cost of flooding is around £70 million. Note however that flooding from wave overtopping is not fully represented in the assessment of flood risk and the impact of coastal flooding may be underestimated.

SEPA lead development of the flood risk management plans for Scotland and delivery of flood warning services. Local flood risk management planning is led by Glasgow City Council, who is the lead authority. Other responsible authorities include 9 more local authorities, Scottish Water, Loch Lomond and the Trossachs National Park. They are supported by Scottish Government agencies including Forestry and Land Scotland, Scottish Forestry and Transport Scotland.

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

Actions across the Local Plan District

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

	Awareness raising
Action	SEPA the responsible authorities and other organisations such as the Scottish Flood Forum work together to help communities understand the risk of flooding and what actions individuals can take through national and local initiatives. Improved awareness of flood risk and actions that prepare individuals, homes and businesses for flooding can reduce the overall impact of flooding. 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.

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

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

	Flood Warning Development Framework
Action	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.

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

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

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

	Maintenance
Action	Local authorities have a duty to assess bodies of water and to carry out clearance and repair works where such works would substantially reduce flood risk. Local authorities are also responsible for the drainage of roads. In addition, local authorities may also be responsible for maintenance of any existing flood protection schemes or works. Scottish Water will continue to undertake risk-based inspection, maintenance and repair on the public sewer network. Asset owners and riparian landowners are responsible for the maintenance and management of their own assets including those which help to reduce flood risk.

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

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

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

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

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

	Self help
Action	Everyone is responsible for protecting themselves and their property from flooding. Property and business owners can take simple steps to reduce damage and disruption to their homes and businesses should flooding happen. This includes preparing a flood plan and flood kit, installing property flood resilience measures, signing up to Floodline, engaging with their local flood group, and ensuring that properties and businesses are insured against flood damage. 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.

Potentially Vulnerable Areas

Potentially Vulnerable Areas (PVA) were designated in 2018 based on the potential current or future risk from all sources of flooding. This designation was informed by the National Flood Risk Assessment (link). As part of continued analysis of flood risk, the National Flood Risk Assessment and Potentially Vulnerable Areas (PVA) will be reviewed every six years to take on board any new information. There are 23 Potentially Vulnerable Areas (PVA) in this Local Plan District. Following sections provide more information on these areas.

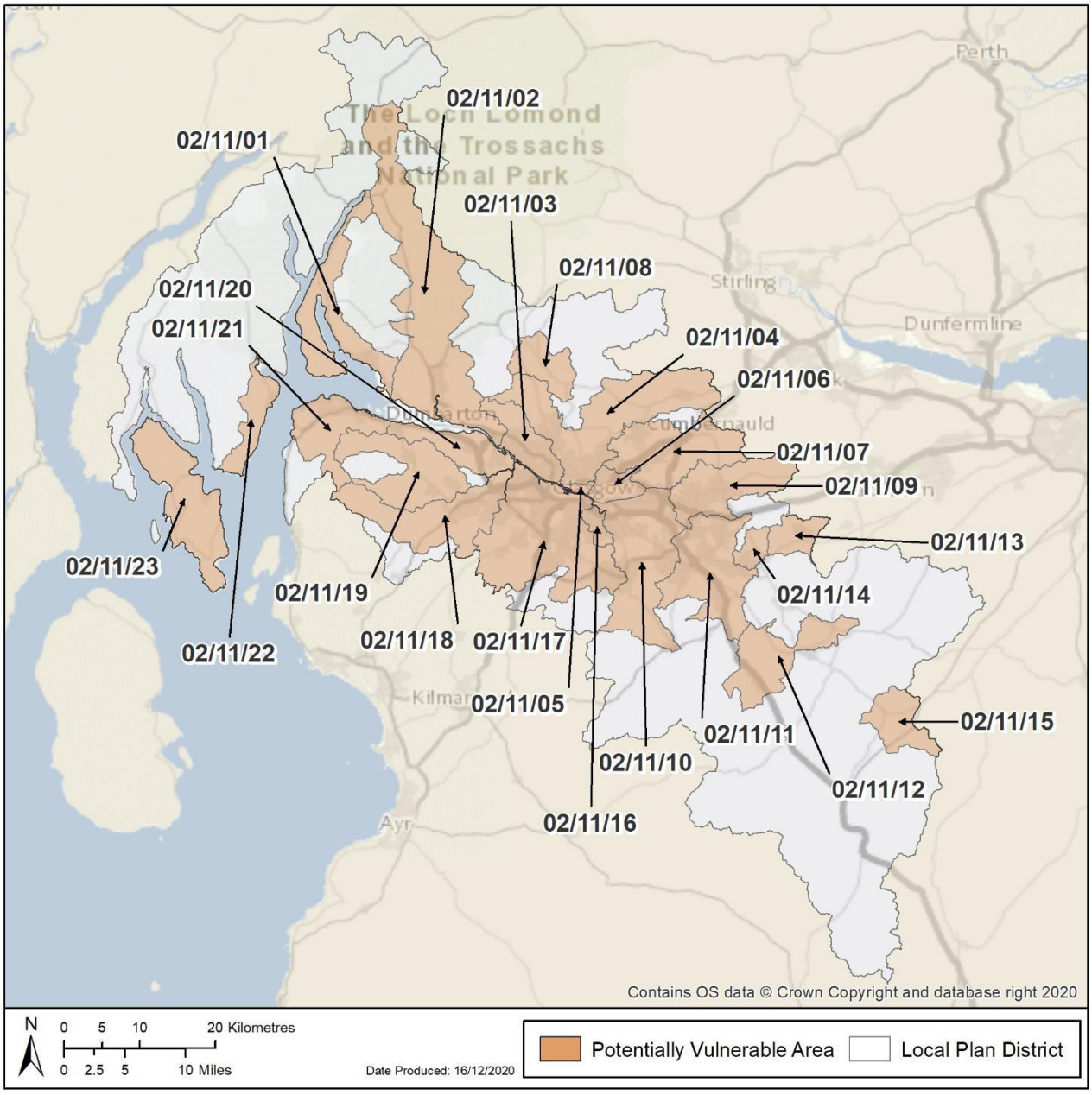


Figure 1. Potentially Vulnerable Areas in Clyde and Loch Lomond Local Plan District

LPD 11 Clyde and Loch Lomond - table of contents

Click the blue text to select your area of interest

PVA Ref	PVA NAME	Local authority
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

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

List of target areas

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

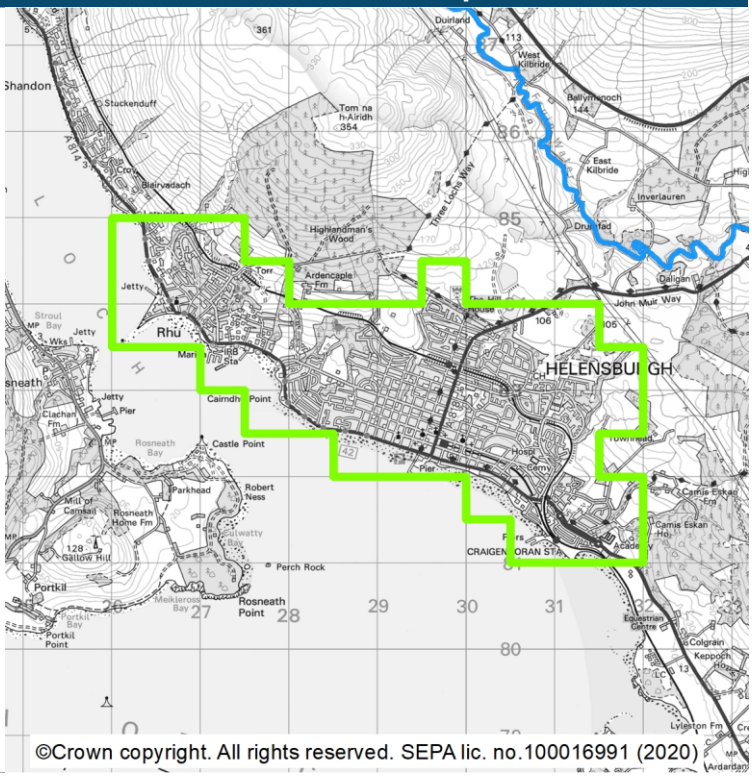
Flood risk management plan datasheet

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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
261	Avoid flood risk	Avoid inappropriate development that increases flood risk in Helensburgh
262	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Helensburgh
263	Reduce flood risk	Reduce the risk of coastal flooding in Helensburgh
264	Reduce flood risk	Reduce the risk of flooding from surface water and small watercourses in Helensburgh

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Property flood resilience scheme (Ref: 2601)
Action	The proposed scheme to provide resilience measures against flooding for individual buildings is to be taken forward to help prevent water entering the property and to minimise flood damage.
Action detail	As part of the Helensburgh Flood Protection Scheme property flood resilience and resistance measures will be implemented.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Shoreline Management Plan (Coastal Adaptive Plan) (Ref: 2602)
Action	An assessment of coastal flood and erosion risk is to be carried out. The plan should include assessment of climate change and develop adaptive approaches to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Progress the development of the shoreline management plan for the Argyll and Bute coastline.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 2603)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 2604)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	The action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 2605)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Flood warning maintenance (Ref: 2606)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Flood scheme or works design (Ref: 2607)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Develop the detailed design of the flood protection scheme in Helensburgh based on the preferred option from the flood study. The preferred option consists of an initial cycle of property flood resistance and resilience measures followed by construction of new revetments, as well as set-back walls. 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.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Community engagement (Ref: 2608)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of the flood protection scheme.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

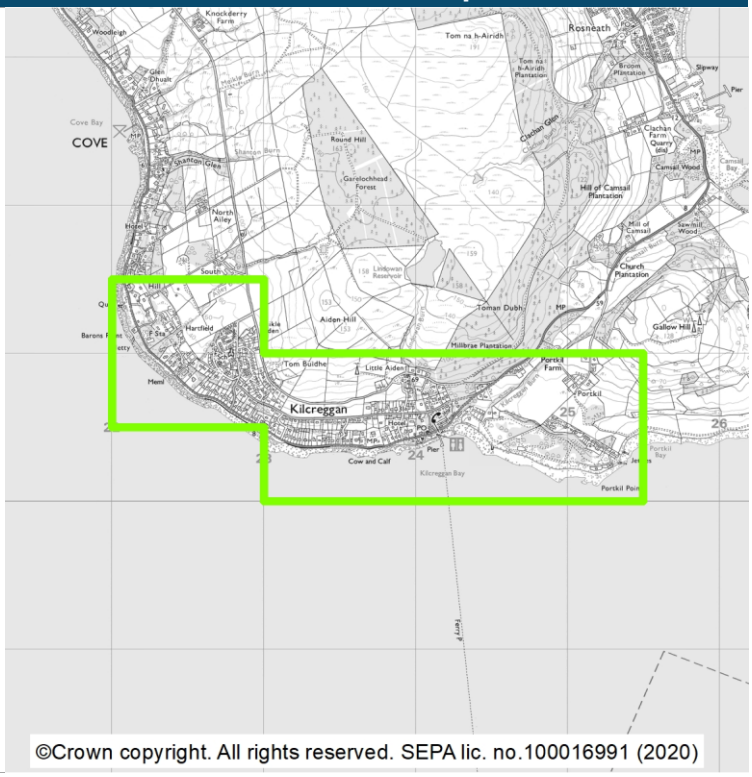
Flood risk management plan datasheet

Kilcreggan (target area 67)

Summary

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 approximately 10 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Surface water management plan (Ref: 6701)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	Implement the surface water management plan. The plan should be reviewed and updated regularly.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Flood scheme or works implementation (Ref: 6702)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

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

What are the opportunities for joint working?

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

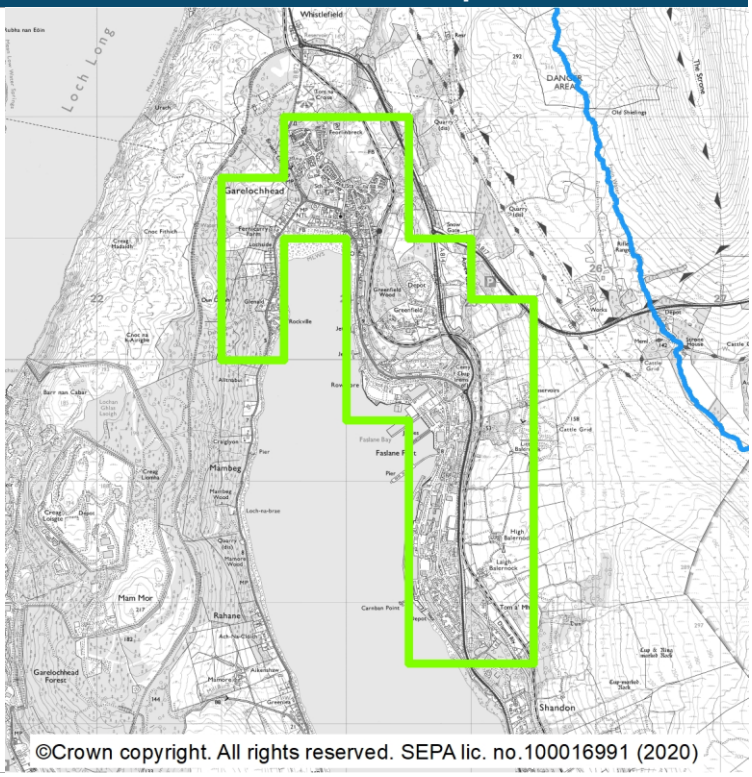
Flood risk management plan datasheet

Garelochhead (target area 111)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1111	Avoid flood risk	Avoid inappropriate development that increases flood risk in Garelochhead
1112	Improve data and understanding	Improve data and understanding of the risk of coastal flooding in Garelochhead
1113	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Garelochhead

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 11101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A flood study 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.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Shoreline Management Plan (Coastal Adaptive Plan) (Ref: 11102)
Action	An assessment of coastal flood and erosion risk is to be carried out. The plan should include assessment of climate change and develop adaptive approaches to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Progress the development of the shoreline management plan for the Argyll and Bute coastline.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 11103)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

02/11/02 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

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

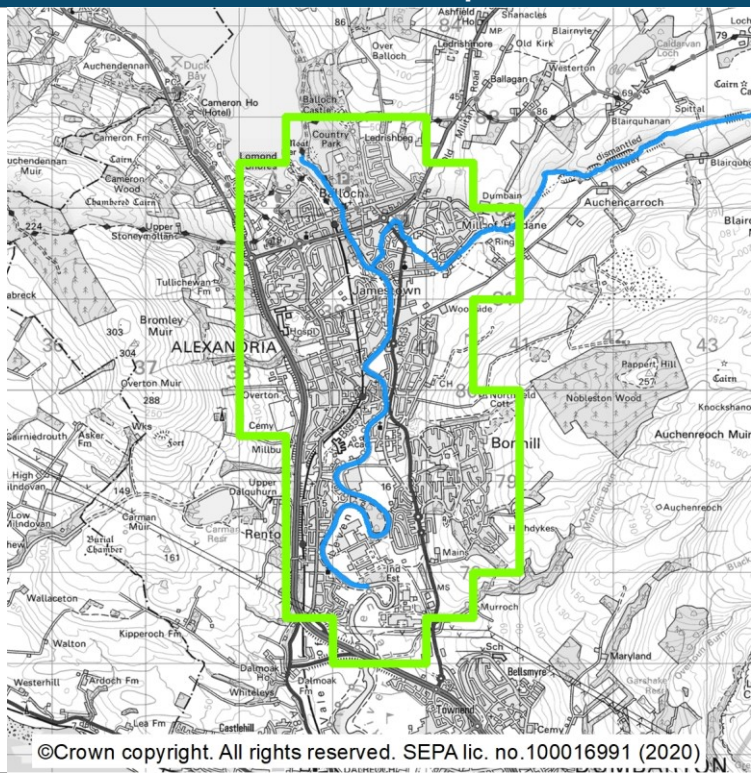
Flood risk management plan datasheet

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 local authority 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 201)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.

	Community engagement (Ref: 202)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 203)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 204)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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. linked to vale of leven Flood Study (2019) if progressed then SMWP, undertaken defore detailed design, if not undertake second half cycle 2
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with Scottish Water.

	Flood warning maintenance (Ref: 205)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Loch Lomond and River Leven flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

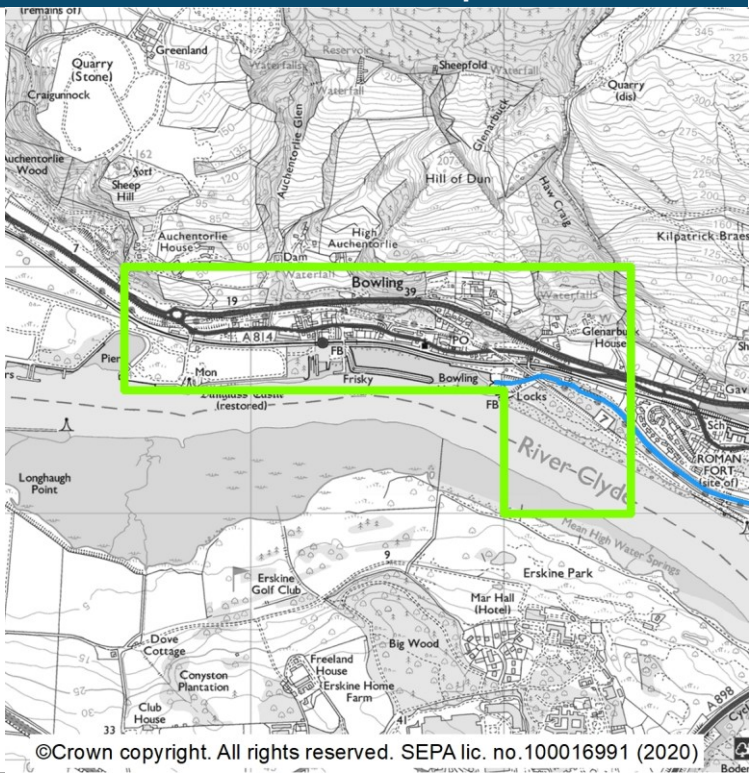
Flood risk management plan datasheet

Bowling (target area 7)

Summary

Bowling lies on the banks of the River Clyde and is located within the West Dunbartonshire local authority 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Data collection (Ref: 701)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	Data collection and monitoring may be required to improve the confidence in flood sources, mechanisms and risk.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.

	Strategic mapping improvements (Ref: 702)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

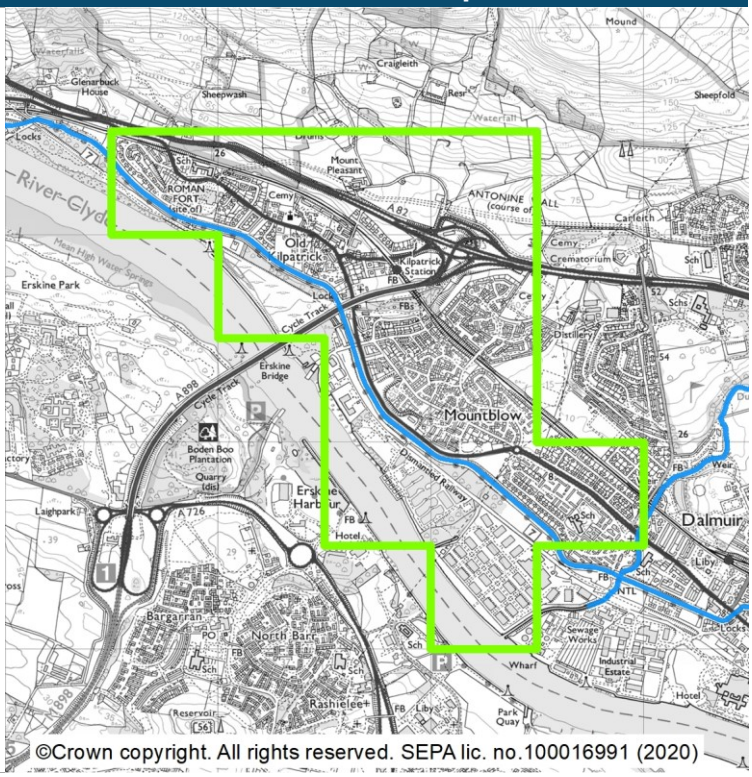
Flood risk management plan datasheet

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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Data collection (Ref: 5301)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	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.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.

	Strategic mapping improvements (Ref: 5302)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 5303)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Flood study (Ref: 5304)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Surface water management plan (Ref: 5305)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

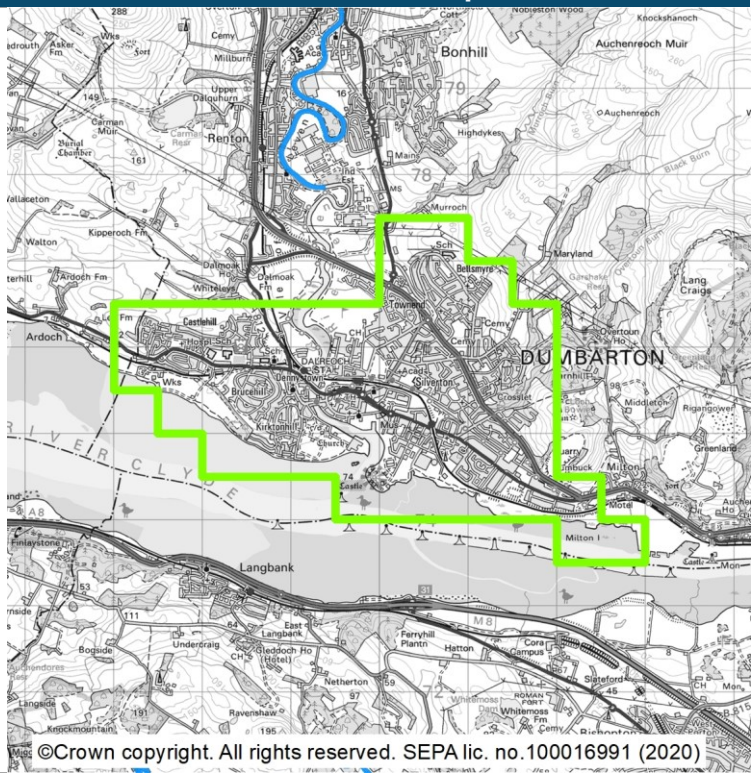
Flood risk management plan datasheet

Dumbarton (target area 61)

Summary

Dumbarton is located on the north bank of the River Clyde and is within the 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 6101)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.

	Community engagement (Ref: 6102)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Flood scheme or works design (Ref: 6103)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.

	Flood scheme or works implementation (Ref: 6104)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	West Dunbartonshire Council have procured a contractor to appraise the optional designs for the Gruggies Burn Flood Protection Scheme.
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Community engagement (Ref: 6105)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Flood study (existing flood defences) (Ref: 6106)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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).
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with SEPA.

	Sewer flood risk assessment (Ref: 6107)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 6108)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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. linked to vale of leven Flood Study (2019) if progressed then SMWP, undertaken defore detailed design, if not undertake second half cycle 2
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with Scottish Water.

	Flood defence maintenance (Ref: 6109)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Maintenance of the Knowles Burn Flood Protection Scheme (2007)
Coordination	Action delivery lead is West Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 6110)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 6111)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

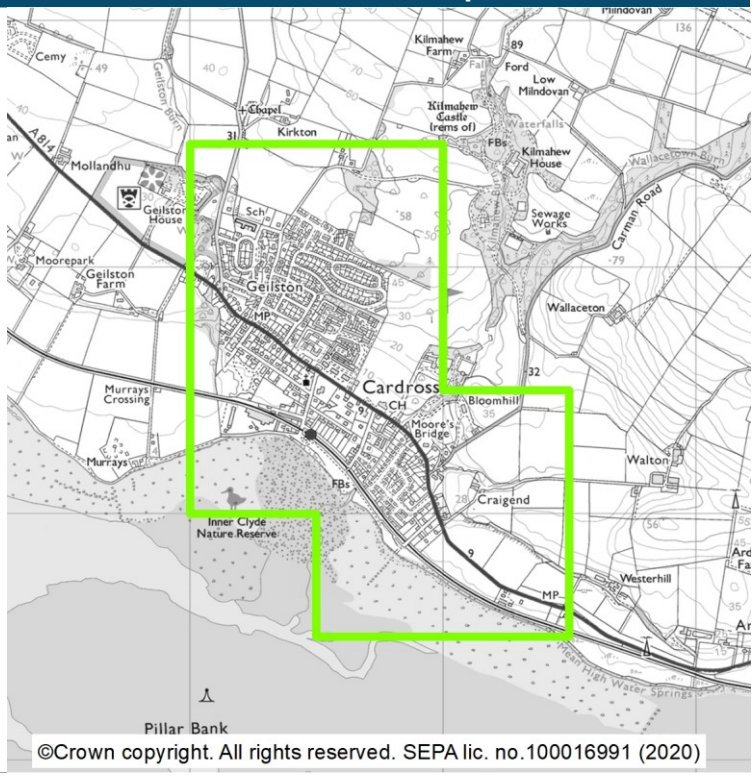
Flood risk management plan datasheet

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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 10501)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A flood study 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.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Shoreline Management Plan (Coastal Adaptive Plan) (Ref: 10502)
Action	An assessment of coastal flood and erosion risk is to be carried out. The plan should include assessment of climate change and develop adaptive approaches to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Progress the development of the shoreline management plan for the Argyll and Bute coastline.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 10503)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 10504)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	The action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

02/11/03 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

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

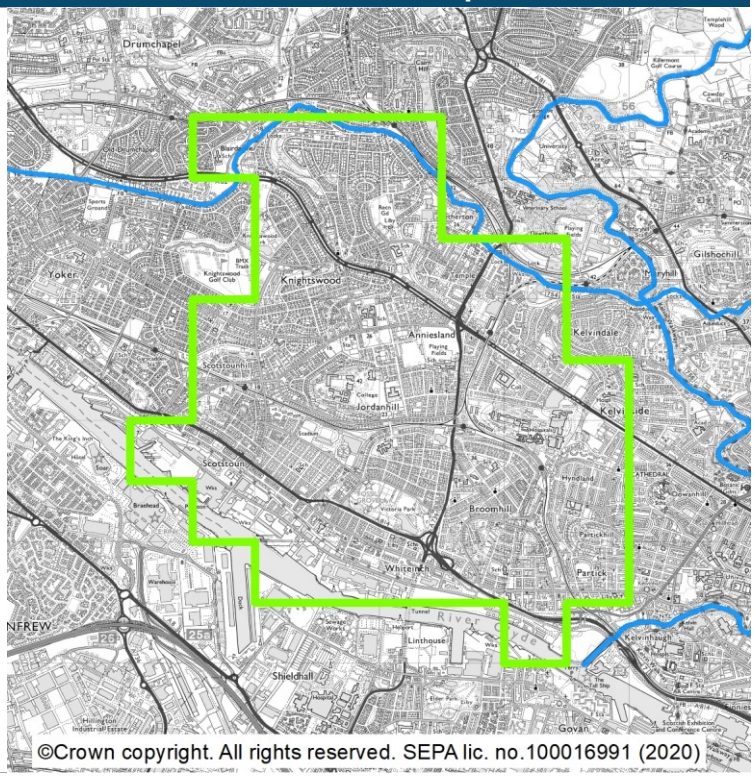
Flood risk management plan datasheet

Glasgow west end (target area 50)

Summary

Glasgow West End is primarily within the Glasgow City local authority 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



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. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works implementation (Ref: 5001)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Review surface water management measures identified for High Knightswood and develop a programme to take forward key recommendations where funding permits.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood study (Ref: 5002)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire Council and SEPA.

	Sewer flood risk assessment (Ref: 5003)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 5004)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood warning maintenance (Ref: 5005)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 5006)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

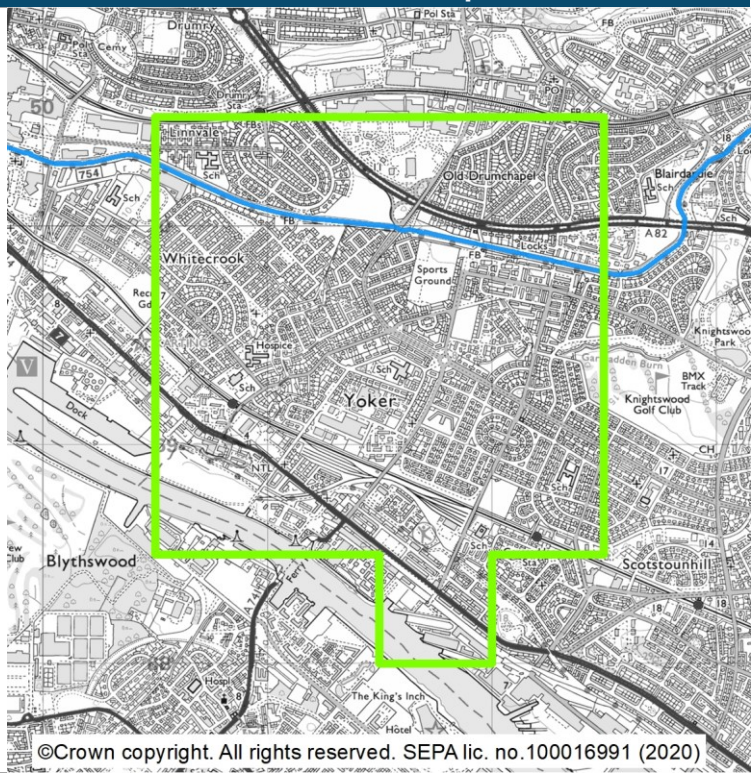
Flood risk management plan datasheet

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



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). Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
511	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
512	Avoid flood risk	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
513	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
514	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 5101)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.

	Community engagement (Ref: 5102)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 5103)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire Council and SEPA.

	Sewer flood risk assessment (Ref: 5104)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 5105)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 5106)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 5107)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

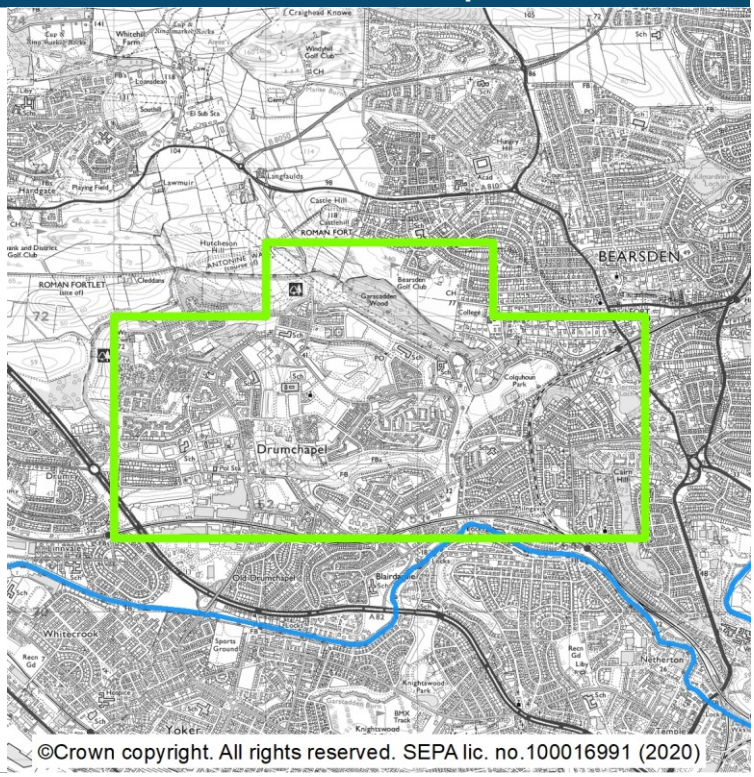
Flood risk management plan datasheet

Drumchapel (target area 52)

Summary

Drumchapel is in north western Glasgow and located within the East Dunbartonshire and Glasgow City local authority 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 5201)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Dunbartonshire Council, Scottish Water and SEPA.

	Community engagement (Ref: 5202)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 5203)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water and East Dunbartonshire Council under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

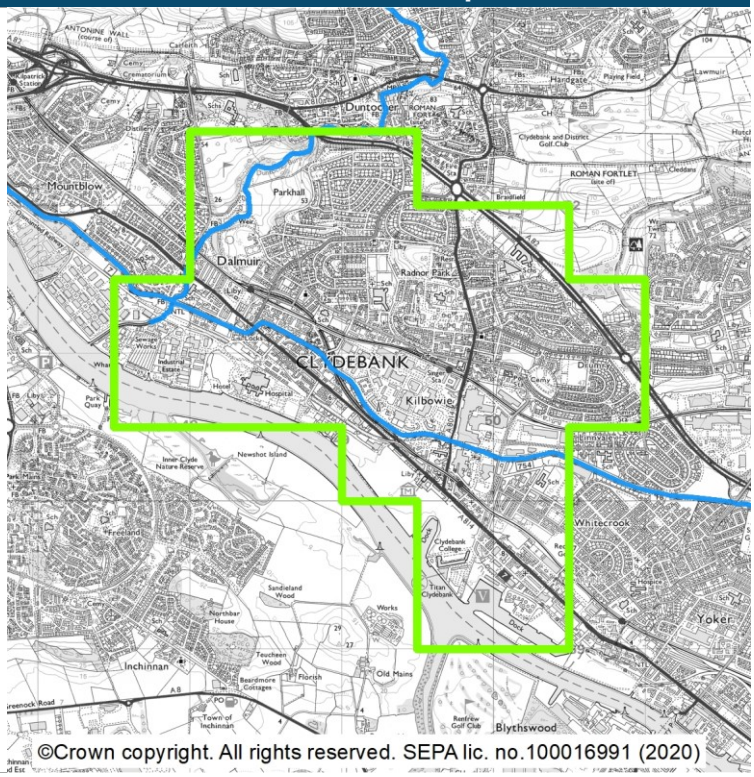
Flood risk management plan datasheet

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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 5401)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 5402)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

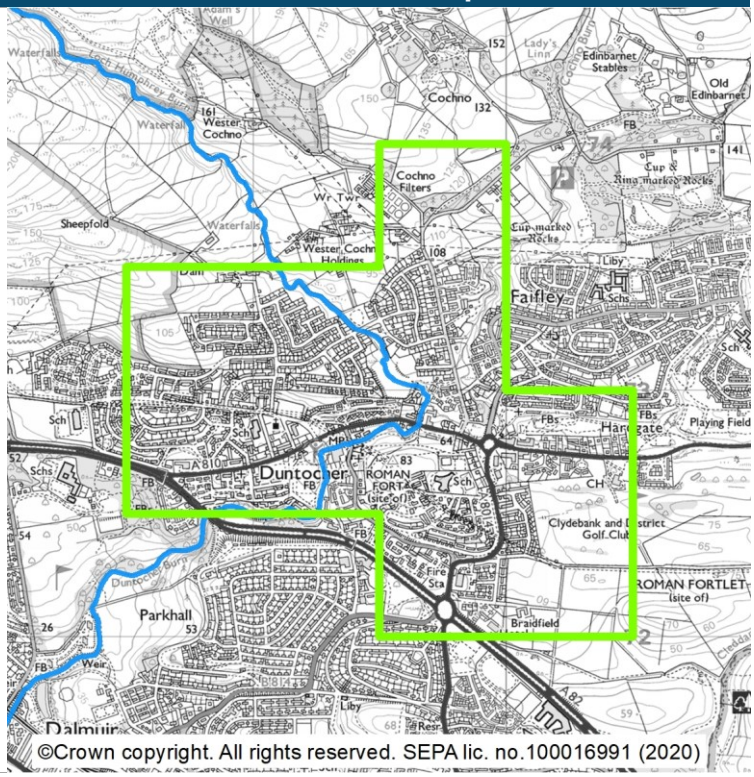
Flood risk management plan datasheet

Duntocher and Hardgate (target area 62)

Summary

Duntocher and Hardgate are 2 villages located west of Glasgow, located within the West Dunbartonshire Council 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 6201)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 6202)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is West Dunbartonshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

02/11/04 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

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)
Torrence and Balmore	(target area 81001)

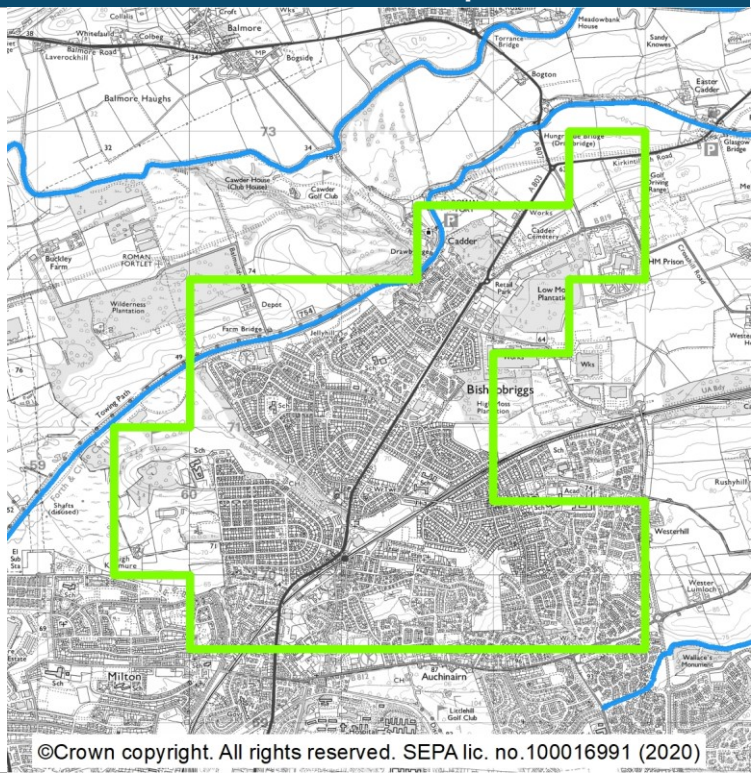
Flood risk management plan datasheet

Bishopbriggs West (target area 4)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 401)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Flood scheme or works implementation (Ref: 402)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Community engagement (Ref: 403)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 404)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

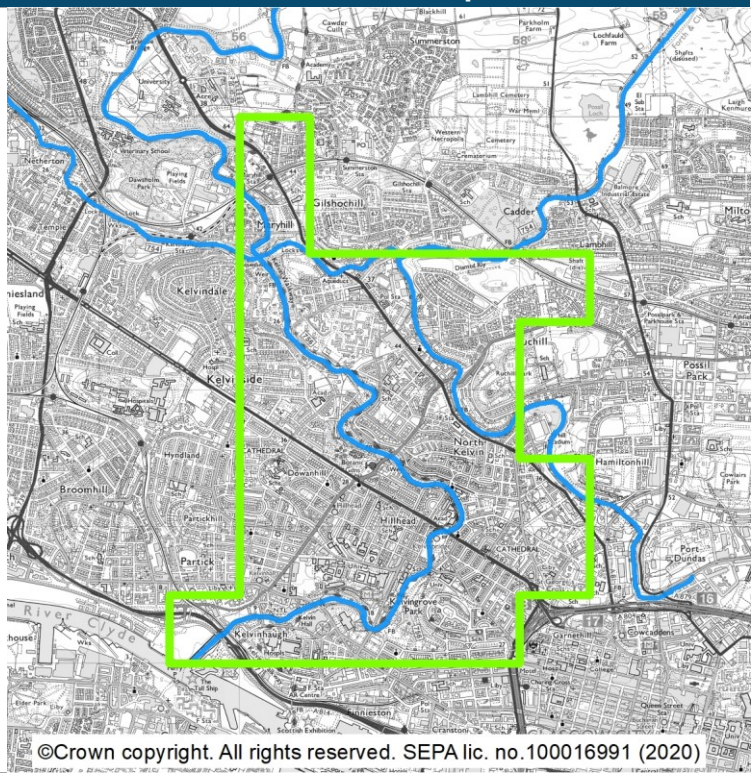
Flood risk management plan datasheet

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 local authority 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 4601)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire Council and SEPA.

	Flood study (Ref: 4602)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Dunbartonshire Council.

	Sewer flood risk assessment (Ref: 4603)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 4604)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood warning maintenance (Ref: 4605)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the River Kelvin flood warning scheme. The scheme should be investigated for improvement and/or recalibration
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water and East Dunbartonshire Council under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

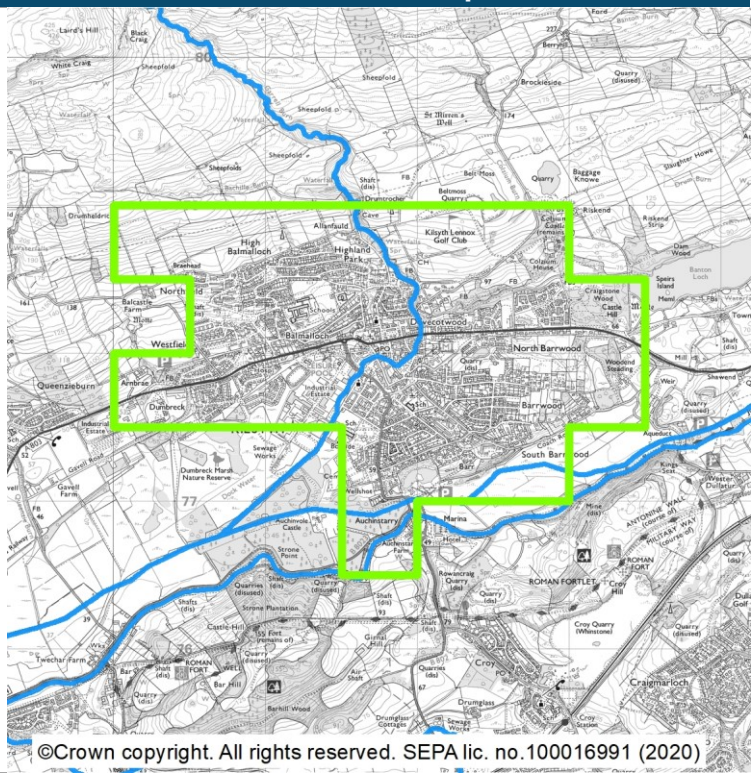
Flood risk management plan datasheet

Kilsyth (target area 79)

Summary

Kilsyth is located halfway between Glasgow and Stirling, within North Lanarkshire and is within North Lanarkshire Council 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 7901)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Canals.

	Community engagement (Ref: 7902)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 7903)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A more detailed flood modelling should be carried out to further investigate the interaction between surface water and river sources.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Flood study (options appraisal) (Ref: 7904)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Surface water management plan (Ref: 7905)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	North Lanarkshire Council to complete the development of the plan and review feasible options in collaboration with Scottish Canals.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water, SEPA and Scottish Canals.

	Sewer flood risk assessment (Ref: 7906)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

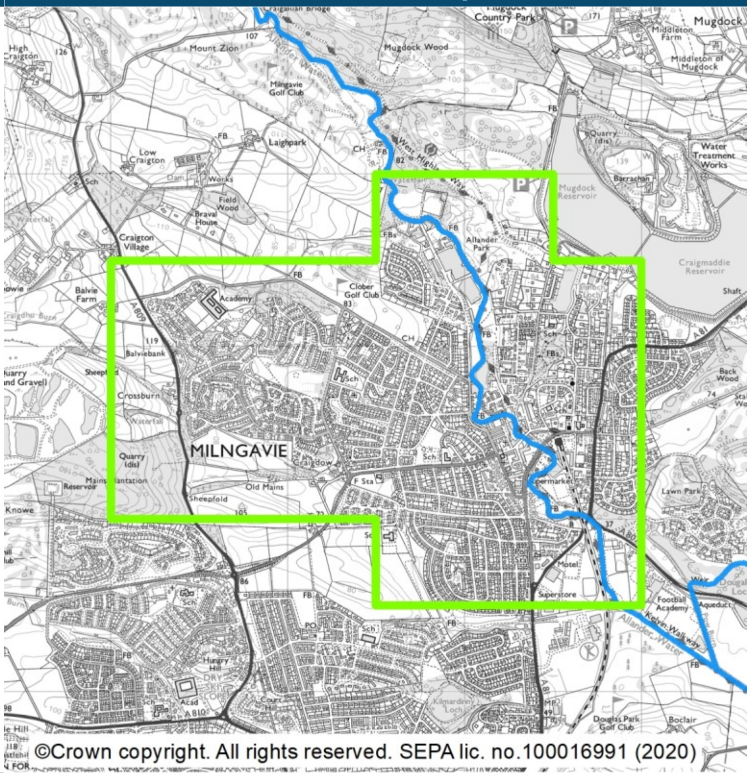
SEPA and responsible authorities carry out actions in all areas which help to manage current and future flooding. These actions help to ensure that key aspects of flood risk management are taken forward in all locations. They ensure that for example new housing developments occur in the right places,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

What are the opportunities for joint working?

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

Flood risk management plan datasheet

Milngavie (target area 84)

Summary	Location map
Milngavie lies 10km north-east of Glasgow, on the Allander Water and is located within the East Dunbartonshire local authority 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.	

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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (options appraisal) (Ref: 8401)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The local authority to continue implementation of the surface water management plan, working with Scottish Water as appropriate.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Flood scheme or works design (Ref: 8402)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Flood scheme or works implementation (Ref: 8403)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Community engagement (Ref: 8404)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Flood study (options appraisal) (Ref: 8405)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 8406)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Flood scheme or works design (Ref: 8407)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.

	Community engagement (Ref: 8408)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

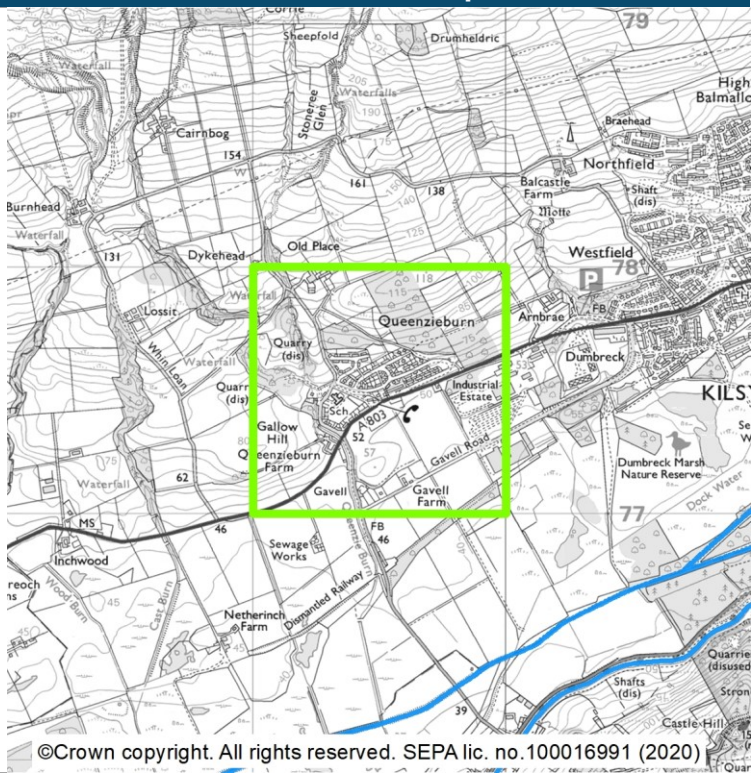
Flood risk management plan datasheet

Queenzieburn (target area 91)

Summary

The small settlement of Queenzieburn is located within the North Lanarkshire Council 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 9101)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Flood study (Ref: 9102)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

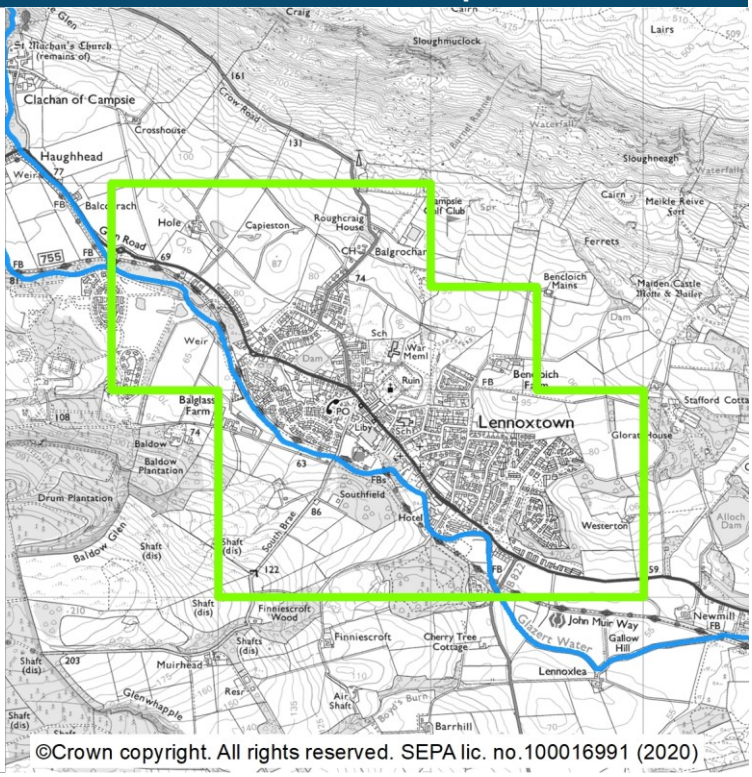
Flood risk management plan datasheet

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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood defence maintenance (Ref: 9802)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 9803)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood study (existing flood defences) (Ref: 9804)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.

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

What are the opportunities for joint working?

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

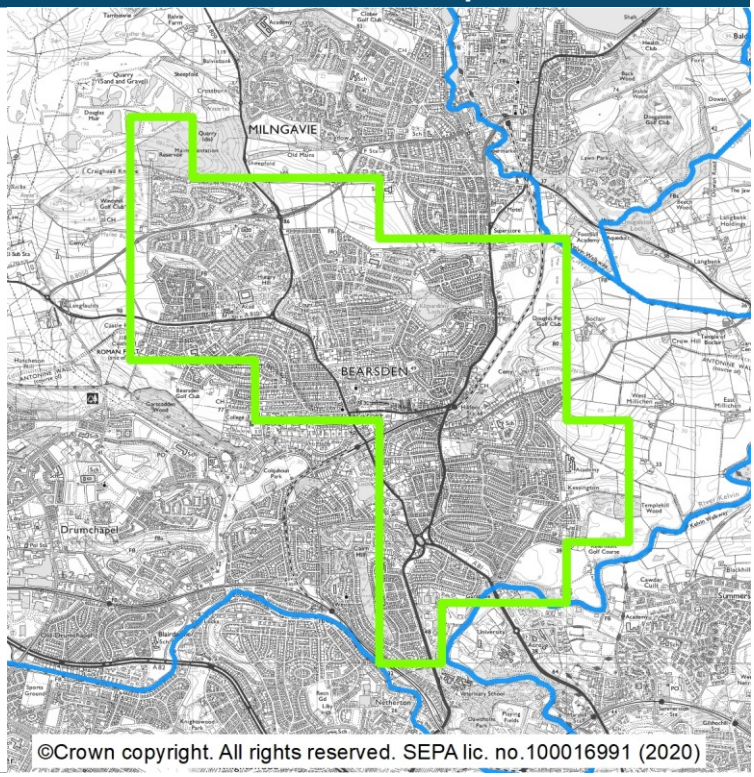
Flood risk management plan datasheet

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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 10301)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Flood scheme or works implementation (Ref: 10302)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Community engagement (Ref: 10303)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 10304)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood study (existing flood defences) (Ref: 10305)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Study of the Heather Avenue Flood Protection Scheme (2018).
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.

	Flood defence maintenance (Ref: 10306)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

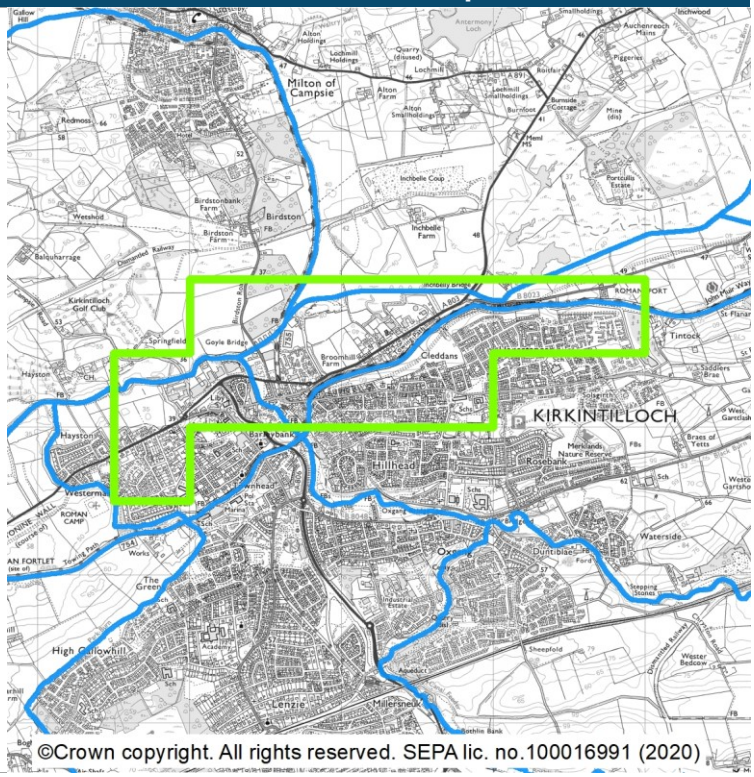
Flood risk management plan datasheet

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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 15701)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood study (Ref: 15702)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.

	Flood study (Ref: 15703)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with North Lanarkshire Council.

	Flood defence maintenance (Ref: 15704)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 15705)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the River Kelvin flood warning scheme. The scheme should be investigated for improvement and/or recalibration
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 15706)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Adaptation plan (Ref: 15707)
Action	Information on climate change is to be used to develop an adaptation plan to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.

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

What are the opportunities for joint working?

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

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

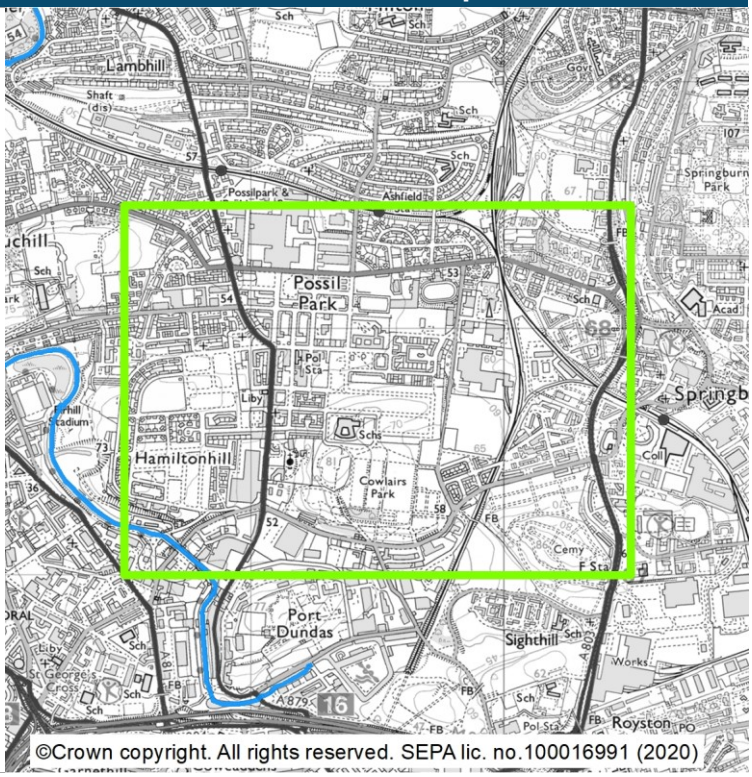
Flood risk management plan datasheet

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



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. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 15801)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 15802)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water, SEPA and Scottish Canals.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

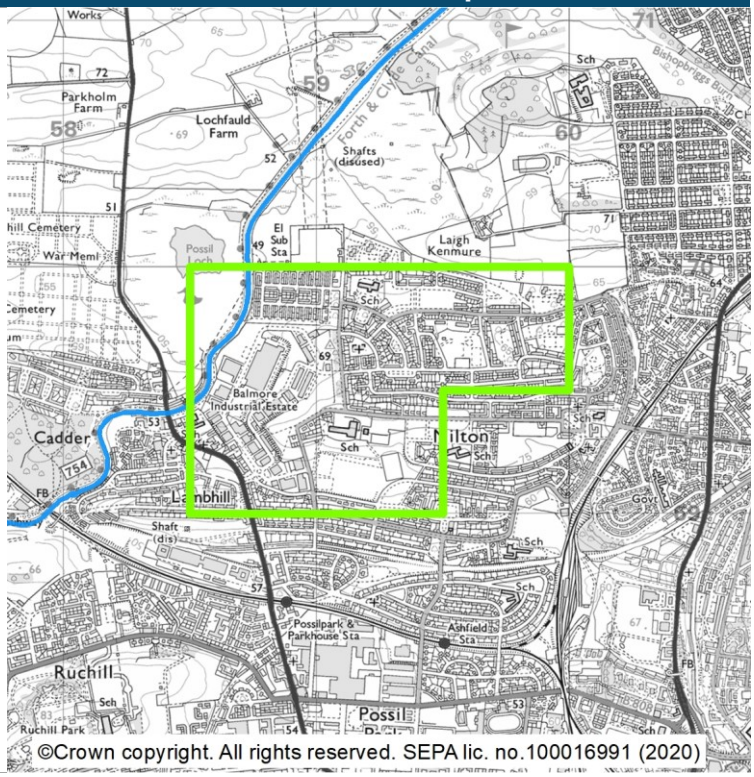
Flood risk management plan datasheet

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 local authority 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 15901)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 15902)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

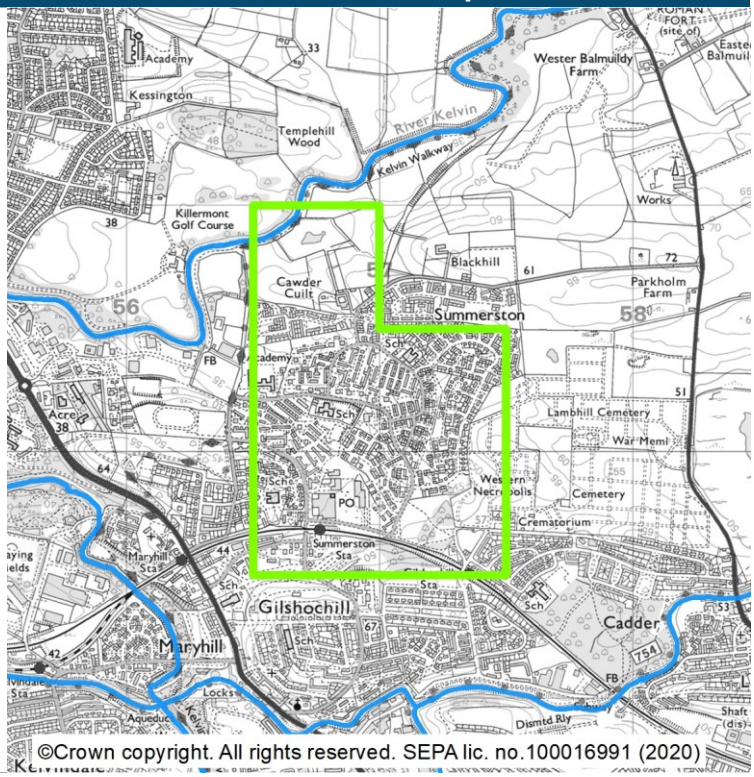
Flood risk management plan datasheet

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



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. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 16001)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 16002)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

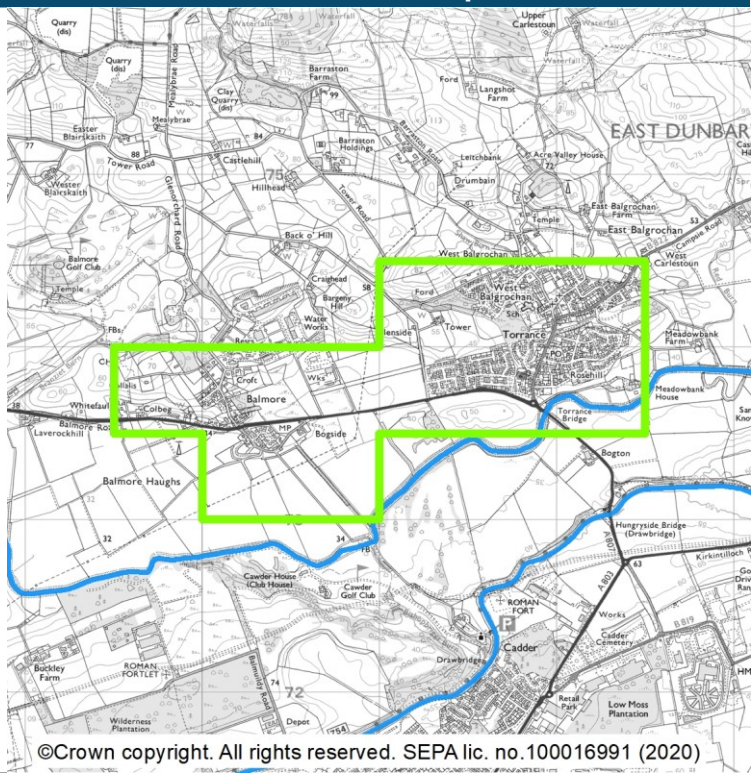
Flood risk management plan datasheet

Torrence 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



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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
810011	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
810012	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the River Kelvin Flood Protection Scheme 1998
810013	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood defence maintenance (Ref: 8100101)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 8100102)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Adaptation plan (Ref: 8100103)
Action	Information on climate change is to be used to develop an adaptation plan to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.

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

What are the opportunities for joint working?

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

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

02/11/05 (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 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Glasgow Centre West	(target area 45001)
Glasgow Centre East	(target area 45002)

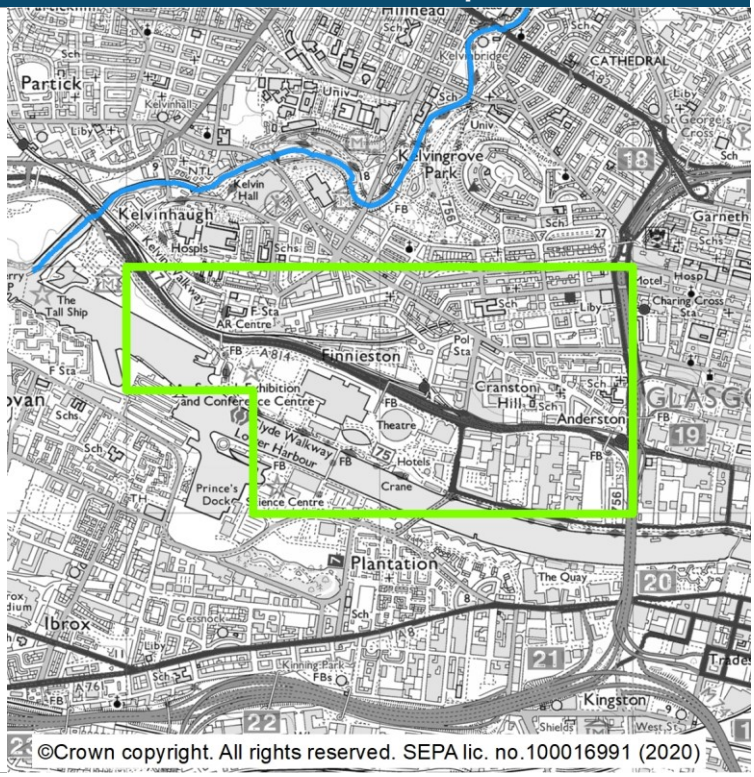
Flood risk management plan datasheet

Glasgow centre West (target area 45001)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
450011	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
450012	Avoid flood risk	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
450013	Improve data and understanding	Improve data and understanding of the performance of the flood defences along the River Clyde in the Exhibition Centre Quarter area
450014	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
450015	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 4500101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Flood study (existing flood defences) (Ref: 4500102)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Sewer flood risk assessment (Ref: 4500103)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 4500104)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water.

	Strategic mapping improvements (Ref: 4500105)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Flood defence maintenance (Ref: 4500106)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 4500107)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

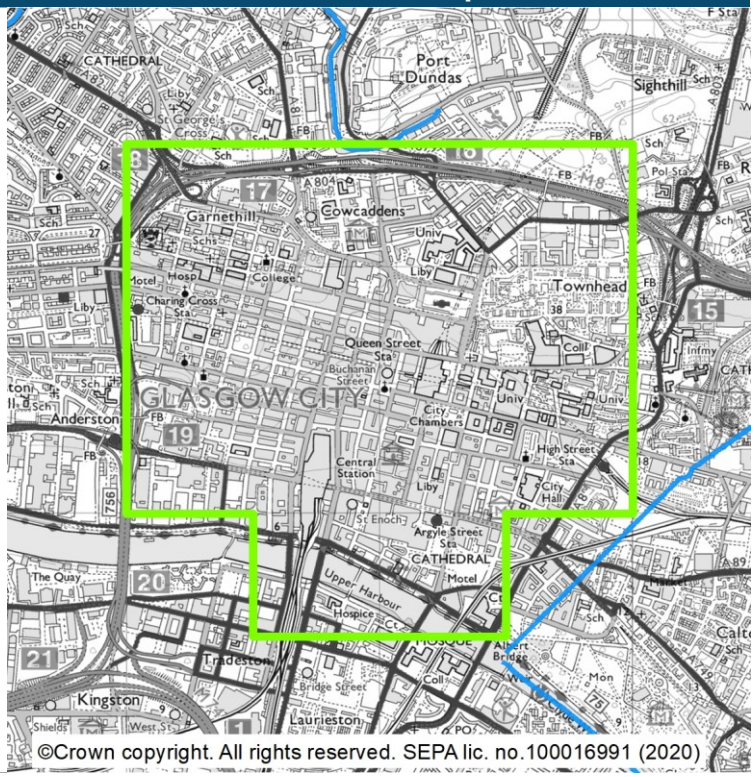
Flood risk management plan datasheet

Glasgow centre East (target area 45002)

Summary

The Glasgow centre east covers the eastern section of central Glasgow. The area is located within the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by the surface water management plan and sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
450021	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
450022	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures
450023	Improve data and understanding	Improve data and understanding of future river flooding in this target area
450024	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
450025	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works implementation (Ref: 4500201)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Glasgow City Council to implement surface water management phase 1 measures in this target area.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 4500202)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Sewer flood risk assessment (Ref: 4500203)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 4500204)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 4500205)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

List of target areas

Glasgow East End	(target area 47)
Carntyne	(target area 49)
Springburn	(target area 167)
Barlanark	(target area 466)
Garthamlock	(target area 16800)

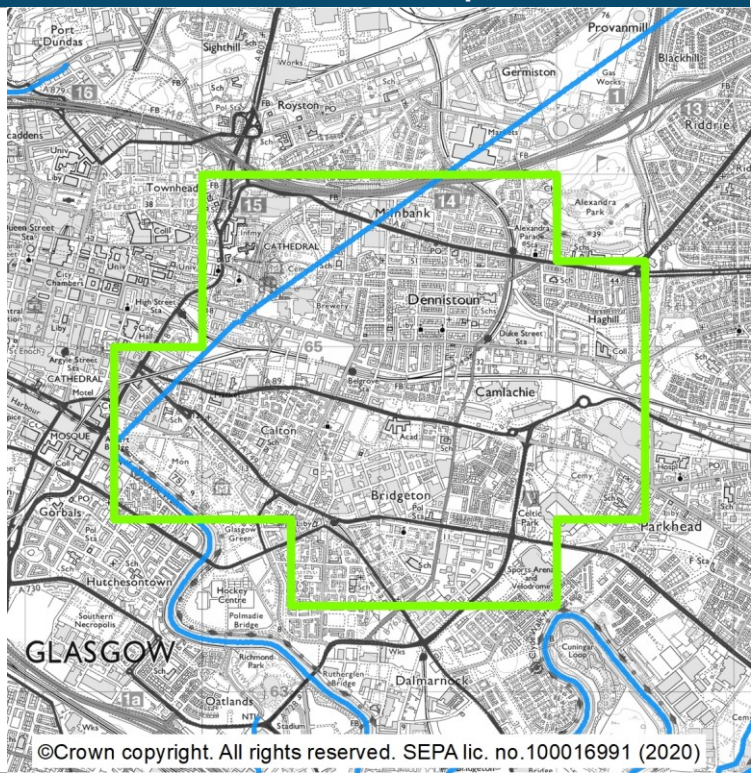
Flood risk management plan datasheet

Glasgow east end (target area 47)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
471	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
472	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Camlachie Burn conduit
473	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
474	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Data collection (Ref: 4701)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 4702)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 4703)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Maintenance to the Camlachie Burn conduit should continue and updates to the maintenance regime be made based on the findings of the condition survey.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Adaptation plan (Ref: 4704)
Action	Information on climate change is to be used to develop an adaptation plan to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

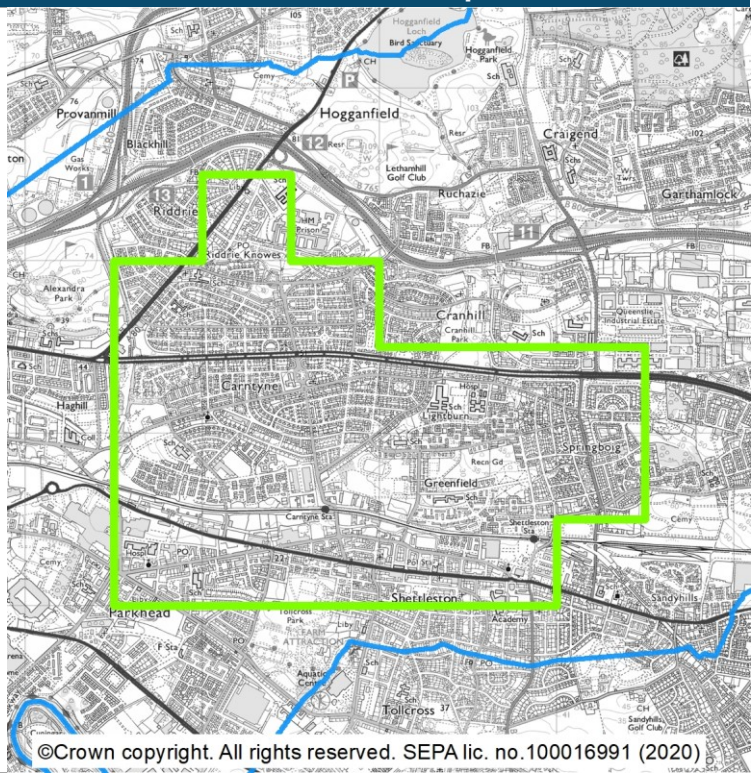
Flood risk management plan datasheet

Carntyne (target area 49)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by the surface water management plan and sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 4901)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Community engagement (Ref: 4902)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Sewer flood risk assessment (Ref: 4903)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

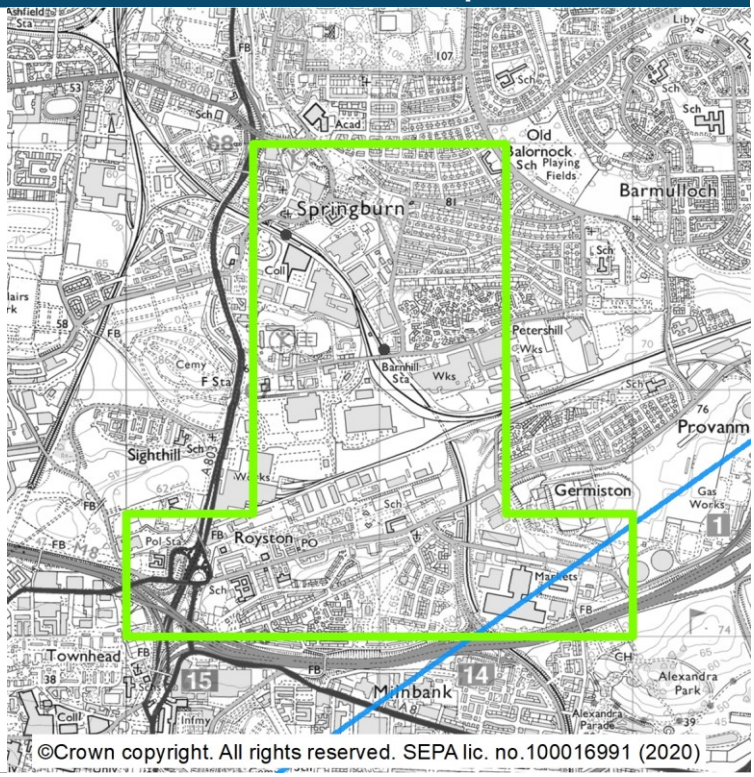
Flood risk management plan datasheet

Springburn (target area 167)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1671	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
1672	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
1673	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Surface water management plan (Ref: 16701)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Sewer flood risk assessment (Ref: 16702)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

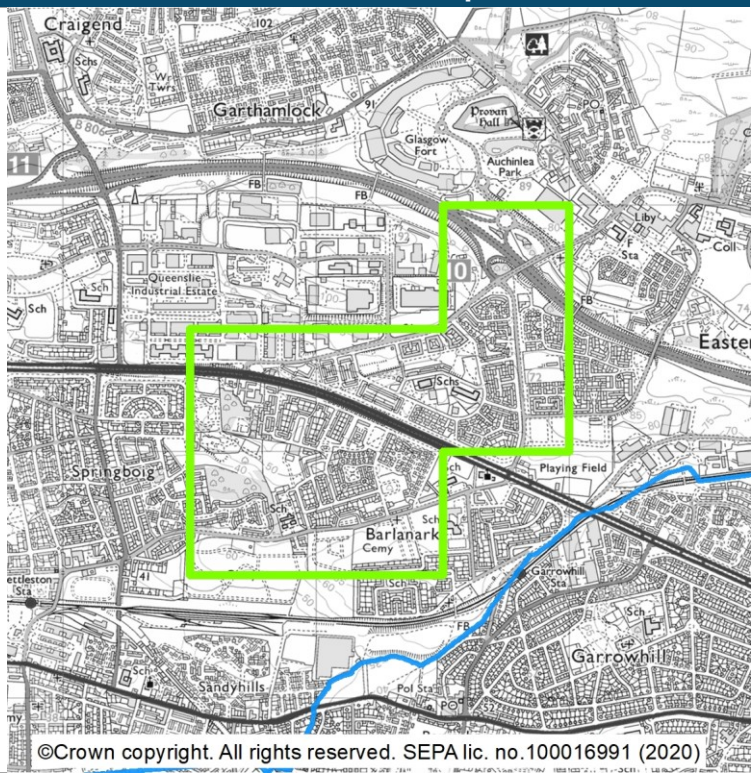
Flood risk management plan datasheet

Barlanark (target area 466)

Summary

The district of Barlanark is located in east Glasgow. It is within the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water by the sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
4661	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
4662	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
4663	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 46601)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 46602)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

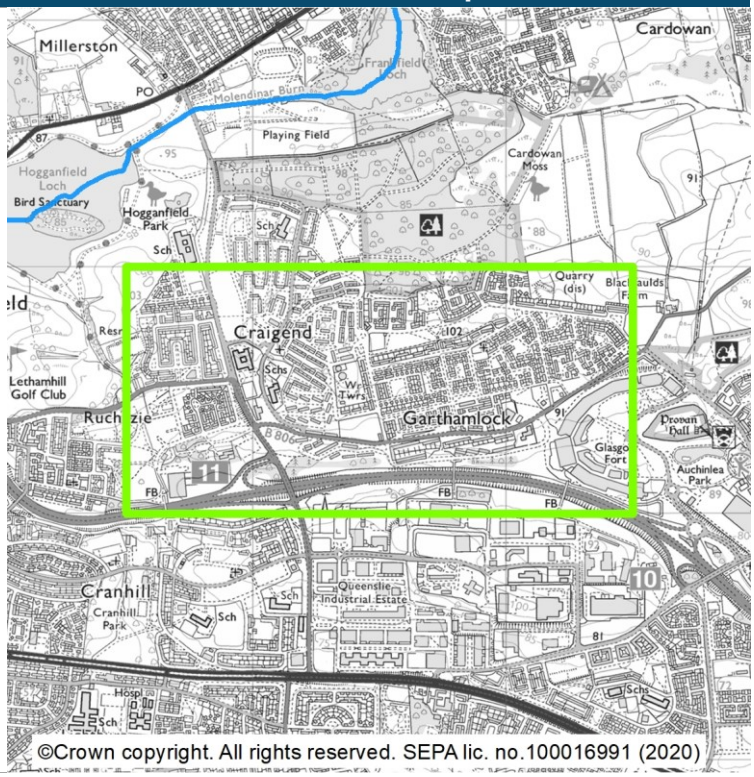
Flood risk management plan datasheet

Garthamlock (target area 16800)

Summary

Garthamlock is a north-eastern suburb of Glasgow and located to the north of the River Clyde. It is within the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water by the sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 1680001)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 1680003)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 1680002)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Glasgow City Council to develop the scope for Phase 2 of the Cardowan surface water management measures.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

List of target areas

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

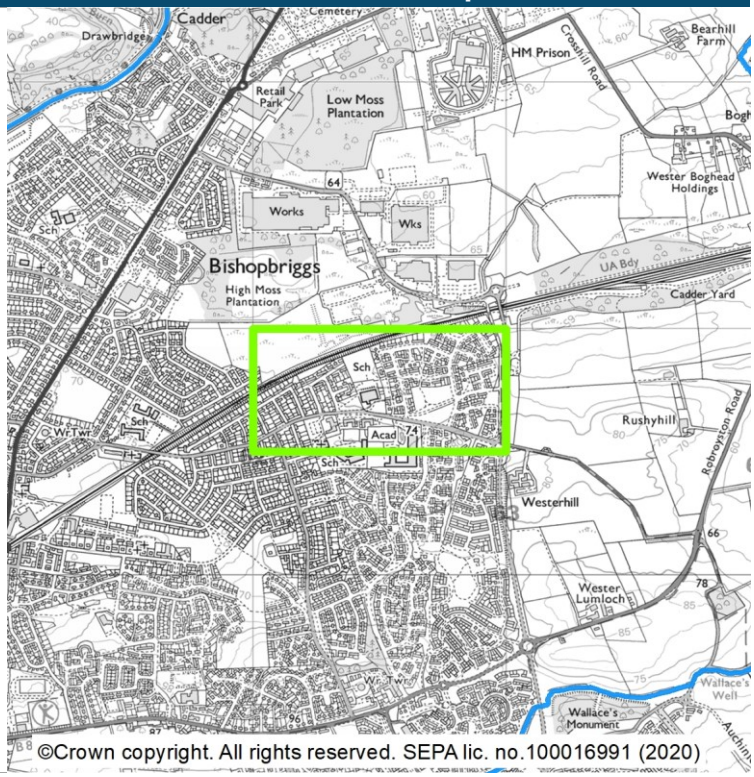
Flood risk management plan datasheet

Bishopbriggs East (target area 5)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
51	Avoid flood risk	Avoid inappropriate development that increases flood risk in Bishopbriggs
52	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Bishopbriggs
53	Reduce flood risk	Reduce the risk of flooding in Bishopbriggs

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 501)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Flood scheme or works implementation (Ref: 502)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

	Community engagement (Ref: 503)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 504)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

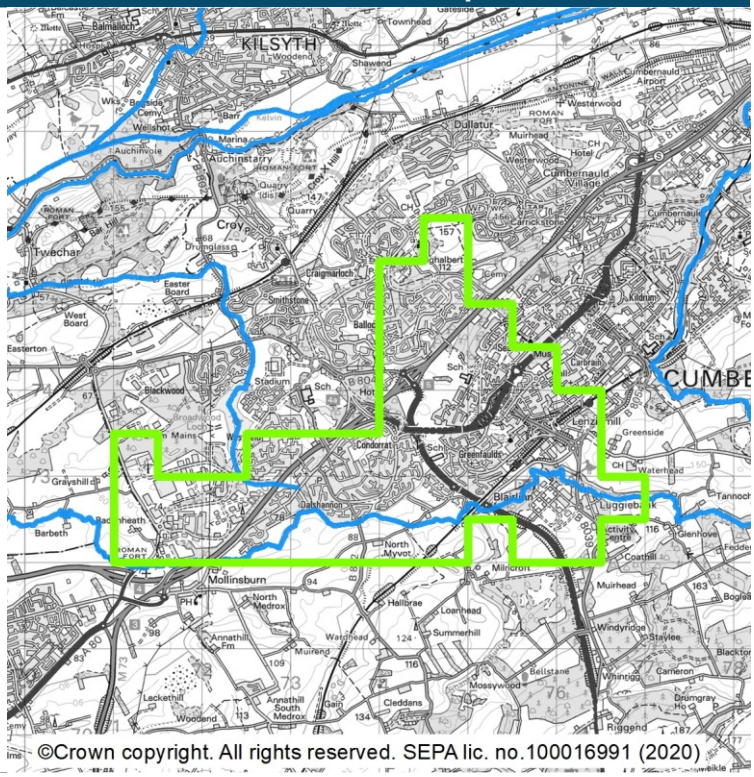
Flood risk management plan datasheet

Cumbernauld (target area 60)

Summary

The western section of the town of Cumbernauld and is within the East Dunbartonshire and North Lanarkshire Council 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (options appraisal) (Ref: 6001)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	North Lanarkshire Council in partnership with East Dunbartonshire Council to continue with the Luggie Water flood study and develop the options appraisal.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with East Dunbartonshire Council.

	Flood study (existing flood defences) (Ref: 6002)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 6003)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 6004)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	North Lanarkshire Council to develop a surface water management plan, review and implement any feasible options as and when funding is available.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

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

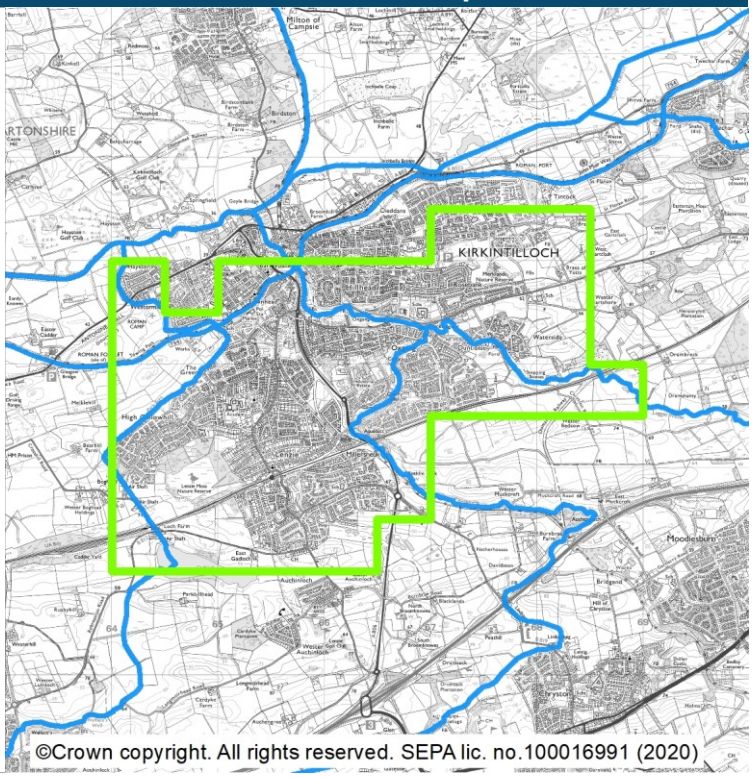
Flood risk management plan datasheet

Kirkintilloch South and Lenzie (target area 81)

Summary

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 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works implementation (Ref: 8101)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	East Dunbartonshire Council to complete the Park Burn Flood Prevention Works.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA.

	Flood study (Ref: 8102)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	East Dunbartonshire Council to undertake joint working with North Lanarkshire Council to understand flood risk from the Luggie Water.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with North Lanarkshire Council.

	Flood study (Ref: 8103)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with SEPA and Glasgow City Council.

	Sewer flood risk assessment (Ref: 8104)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 8105)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Dunbartonshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

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

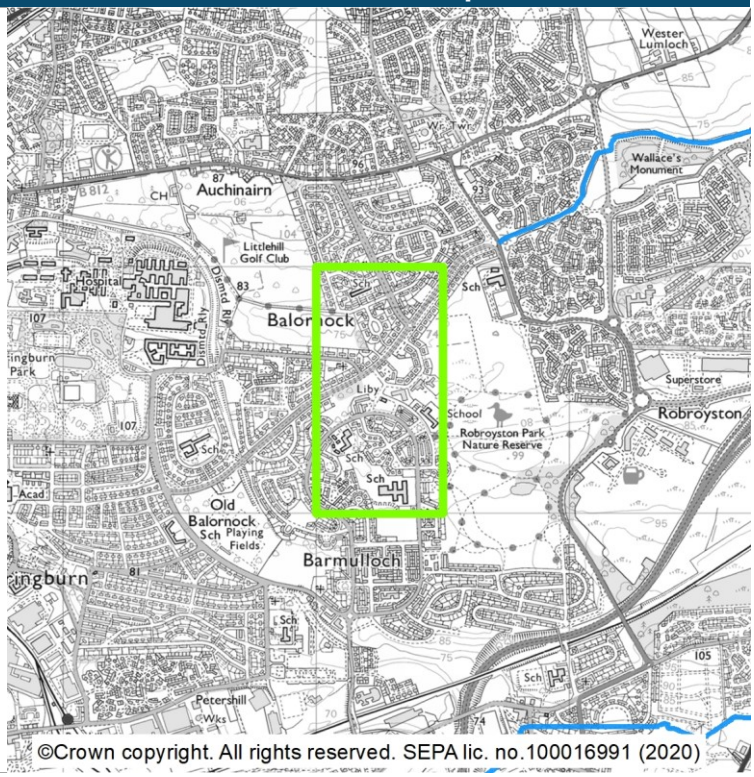
Flood risk management plan datasheet

Balornock (target area 16702)

Summary

Balornock is a suburb of Glasgow. It is located within the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water by the sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 1670201)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 1670202)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

02/11/08 (Strathblane)

This area is designated as a Potentially Vulnerable Area due to flood risk in Strathblane. The main source of flooding is from surface water. Recent flooding has occurred in the area.

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

List of target areas

Strathblane	(target area 152)

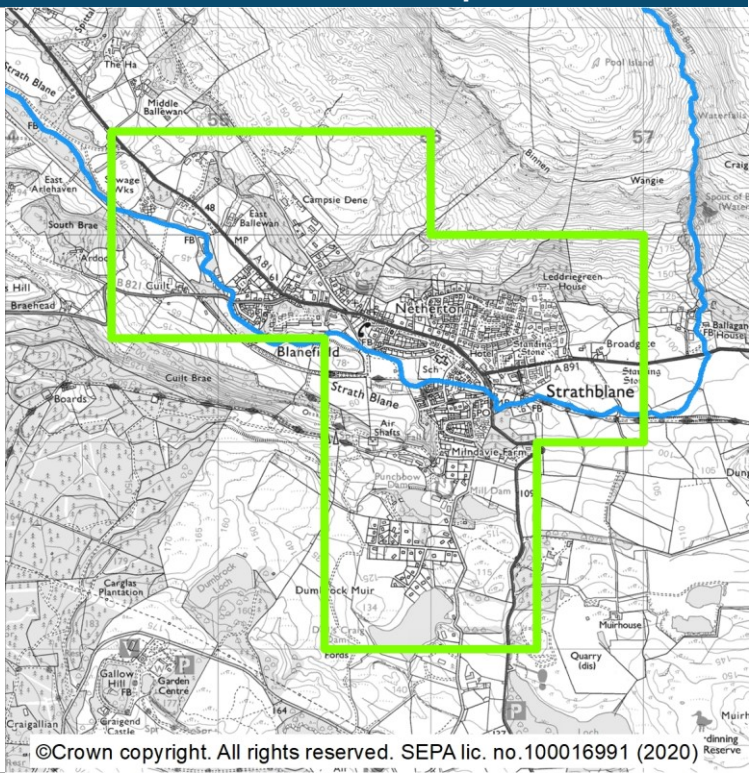
Flood risk management plan datasheet

Strathblane (target area 152)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1521	Avoid flood risk	Avoid inappropriate development that increases flood risk in Strathblane
1522	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Strathblane
1523	Reduce flood risk	Reduce the risk of flooding from small watercourses and surface water in Strathblane

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Community engagement (Ref: 15201)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Awareness raising and community engagement should be 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.
Coordination	Action delivery lead is Stirling Council and coordination will be determined once the actions have been finalised.

	Community resilience group (Ref: 15202)
Action	The group of community volunteers work to prepare and put in practice their Community Resilience Plan and be supported by the local authority.
Action detail	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.
Coordination	Action delivery lead is the community and coordination will be determined once the actions have been finalised.

	Data collection (Ref: 15203)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	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.
Coordination	Action delivery lead is Stirling Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 15204)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A 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.
Coordination	Action delivery lead is Stirling Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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.

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

List of target areas

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

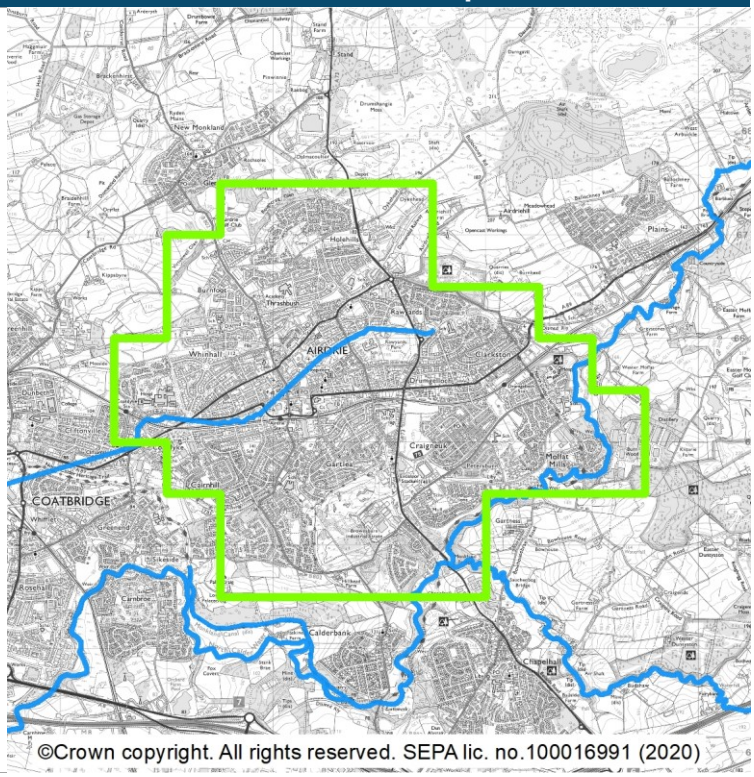
Flood risk management plan datasheet

Airdrie (target area 102)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 10201)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

	Sewer flood risk assessment (Ref: 10202)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 10203)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	North Lanarkshire Council to complete the development of a surface water management plan and review options.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with SEPA.

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

What are the opportunities for joint working?

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

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

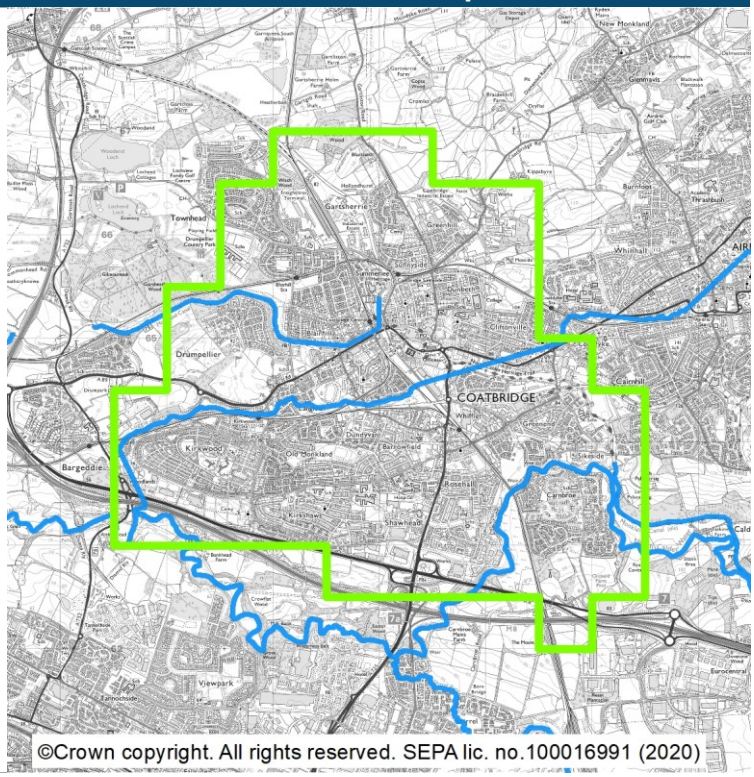
Flood risk management plan datasheet

Coatbridge (target area 106)

Summary

Coatbridge is a town located in North Lanarkshire. 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 10601)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood warning scoping (Ref: 10602)
Action	The potential to provide a new flood warning scheme is to be considered by SEPA. Flood warnings are only effective where it is possible to send a warning message with sufficient time to allow communities to take appropriate actions before flooding occurs.
Action detail	Scoping for a river and surface water flood warning scheme will be carried out in Coatbridge.
Coordination	Action delivery lead is SEPA and coordination will be determined once the action has been finalised.

Actions proposed after June 2028

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

	Flood study (Ref: 10603)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Surface water management plan (Ref: 10604)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

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

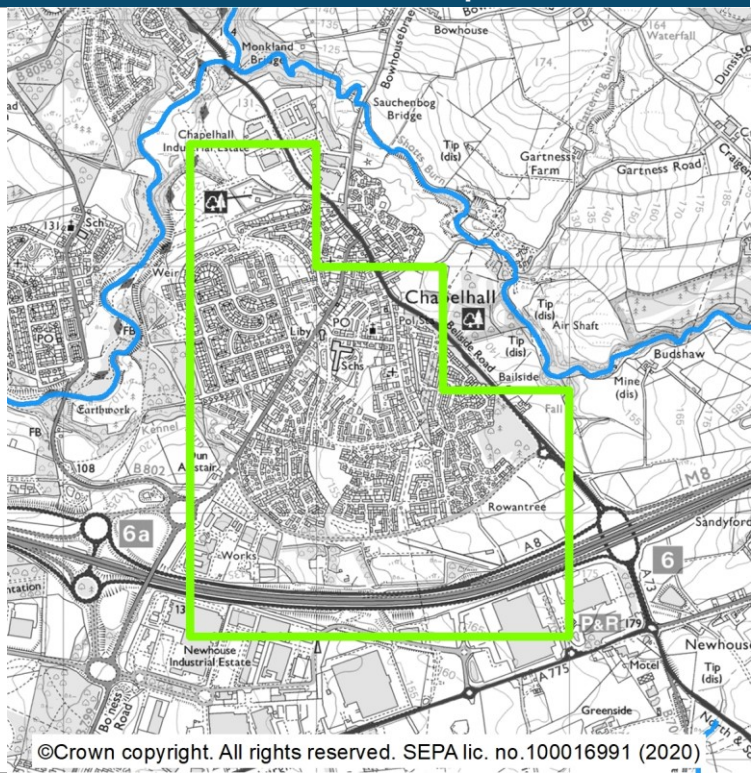
Flood risk management plan datasheet

Chapelhall (target area 161)

Summary

Chapelhall is a village located near the North Calder Water and within the North Lanarkshire Council 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1611	Avoid flood risk	Avoid inappropriate development that increases flood risk in Chapehall
1612	Improve data and understanding	Improve data and understanding of surface water flooding in Chapehall

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 16101)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 16102)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

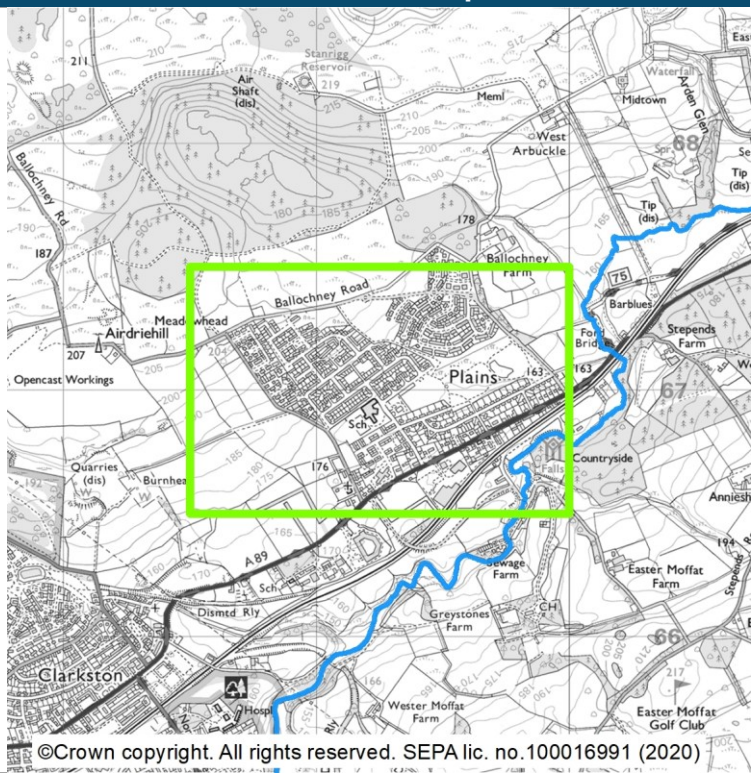
Flood risk management plan datasheet

Plains (target area 10300)

Summary

Plains is a village located on the outskirts of Airdrie in North Lanarkshire, 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
103001	Avoid flood risk	Avoid inappropriate development that increases flood risk in Plains
103002	Improve data and understanding	Improve data and understanding of groundwater flooding in Plains

What actions are proposed for this area?

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

Actions proposed after June 2028

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

	Data collection (Ref: 1030001)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

02/11/10 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Hamilton West	(target area 1)
Uddingston	(target area 93)
Strathaven	(target area 101)
East Kilbride East	(target area 108)
Easterhouse	(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)

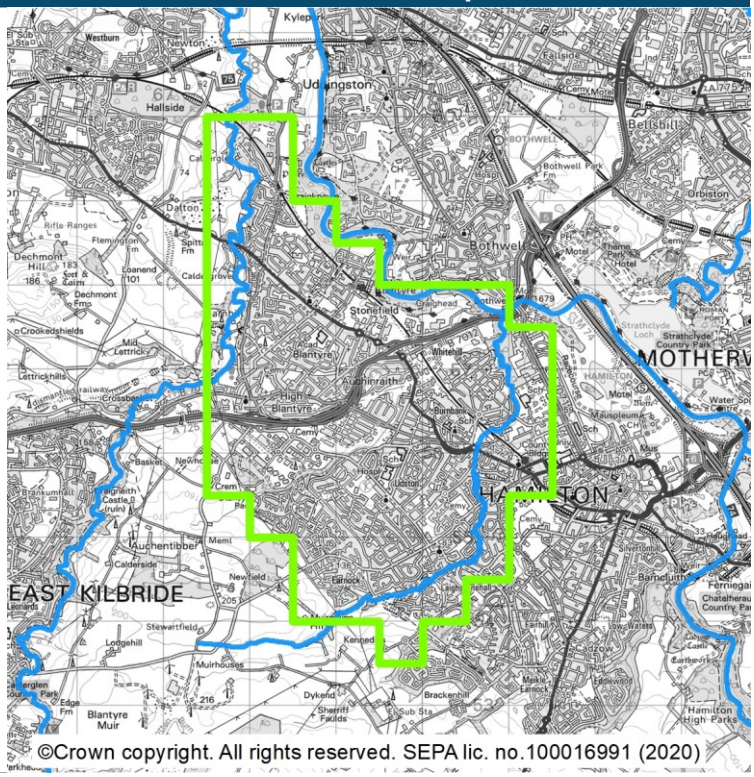
Flood risk management plan datasheet

Hamilton west (target area 1)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
11	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
12	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
13	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.

	Sewer flood risk assessment (Ref: 102)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 103)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

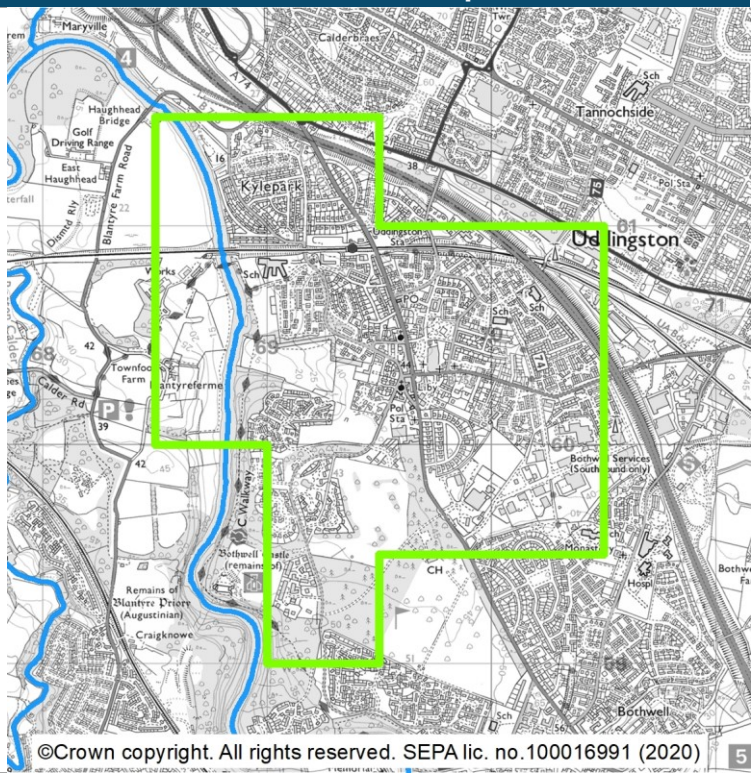
Flood risk management plan datasheet

Uddingston (target area 93)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 9301)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. The performance and condition of the existing flood defences is to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Flood defence maintenance (Ref: 9302)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 9303)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 9304)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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 other sources of flooding. The impacts of climate change on surface water flood risk should be considered.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

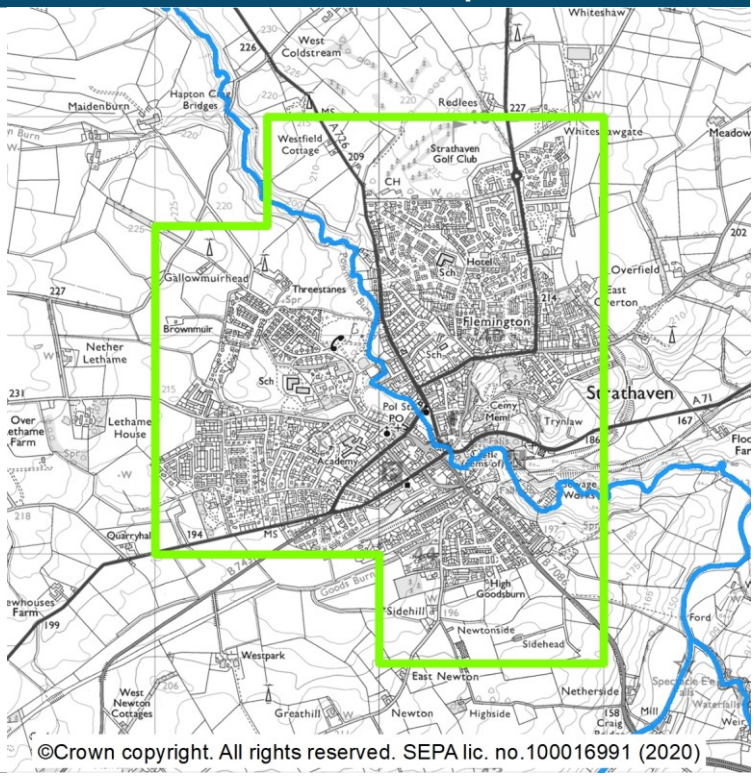
Flood risk management plan datasheet

Strathaven (target area 101)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 10101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A 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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

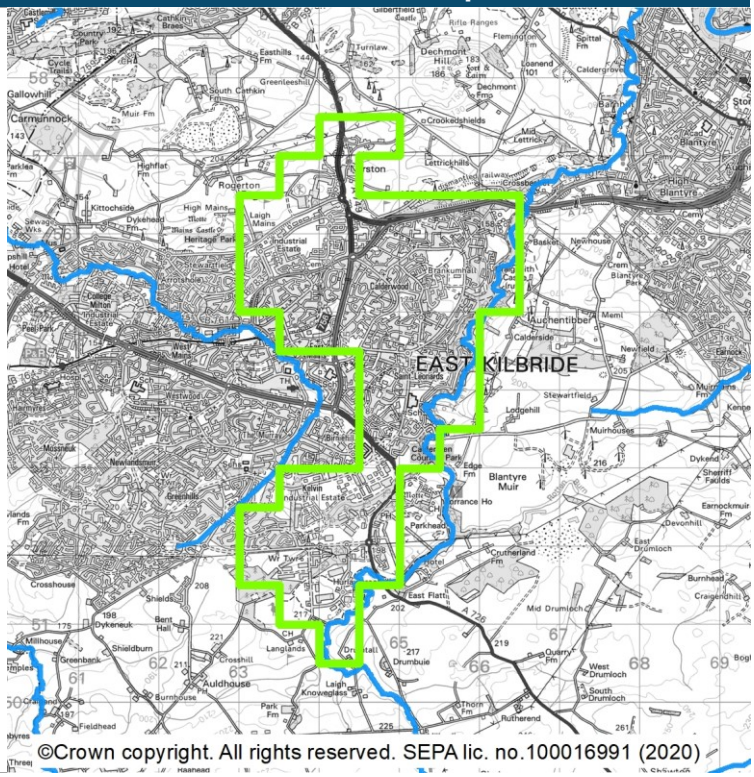
Flood risk management plan datasheet

East Kilbride east (target area 108)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1081	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
1082	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
1083	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 10801)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 10802)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

It has been identified that there are opportunities to work with Transport Scotland to manage flood risk issues in this area.

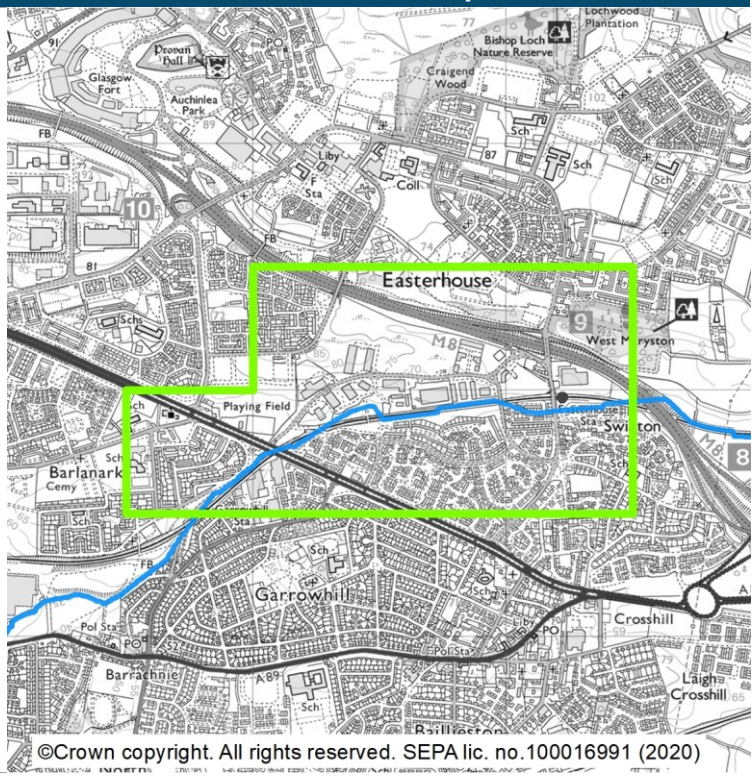
Flood risk management plan datasheet

Easterhouse south (target area 156)

Summary

Easterhouse south is a north-eastern suburb of Glasgow, within the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water by the sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1561	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
1562	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
1563	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (options appraisal) (Ref: 15601)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Sewer flood risk assessment (Ref: 15602)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

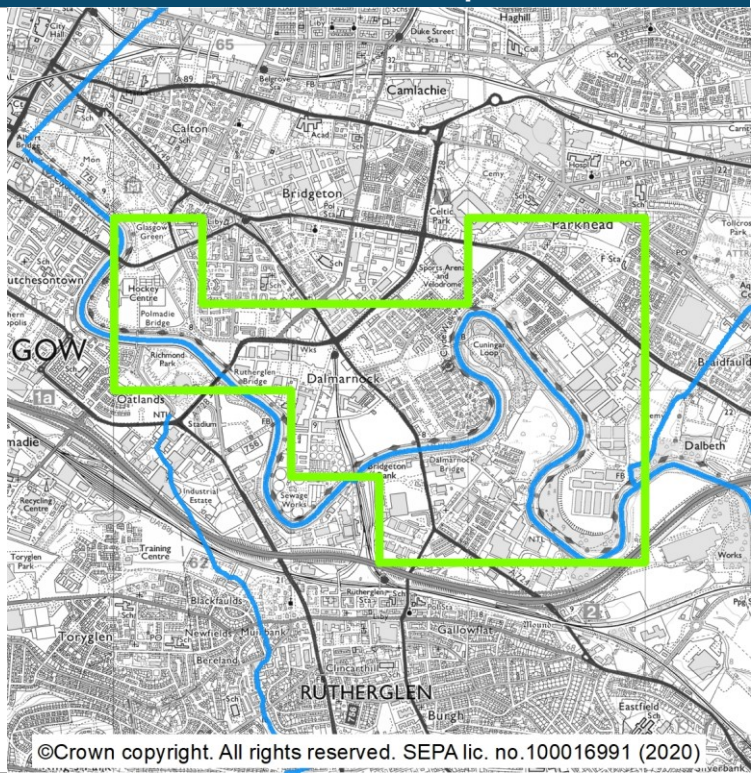
Flood risk management plan datasheet

Dalmarnock (target area 48001)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by the sewer flood risk assessment and for river flooding by the tidal Clyde model (December 2020) and the ongoing River Clyde 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 4800101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Glasgow City Council.

	Flood study (Ref: 4800102)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. The performance and condition of the existing flood defences is to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 4800103)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 4800104)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Clyde Gateway in coordination with South Lanarkshire Council.

	Flood warning maintenance (Ref: 4800105)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

South Lanarkshire Council and Glasgow City Council will continue to work in partnership with Scottish Water, SEPA and Clyde Gateway to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.
Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

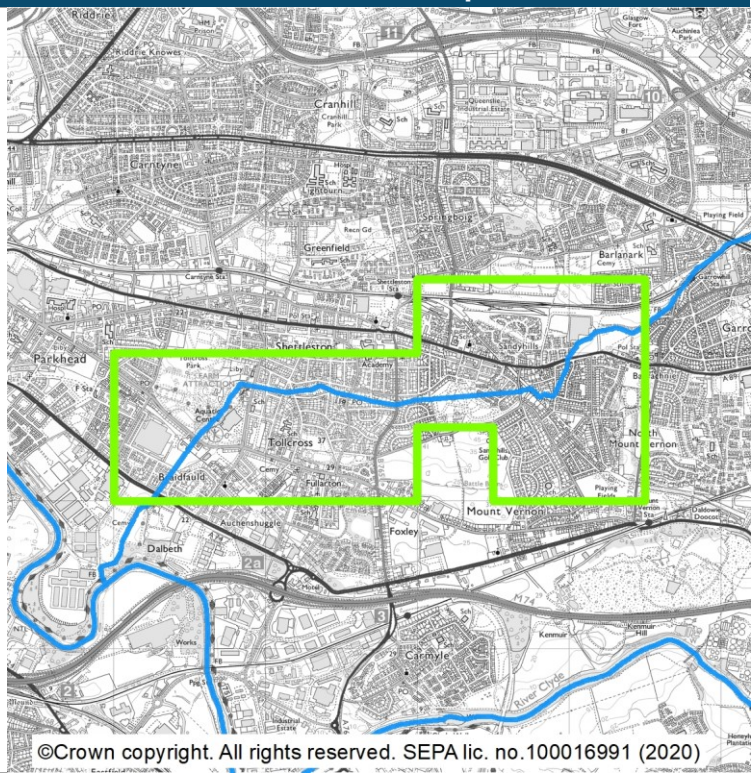
Flood risk management plan datasheet

Tollcross (target area 48002)

Summary

Tollcross is located to the east of Glasgow. It is also located within the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
480021	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
480022	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
480023	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 4800201)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.

	Community engagement (Ref: 4800202)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 4800203)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.
Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

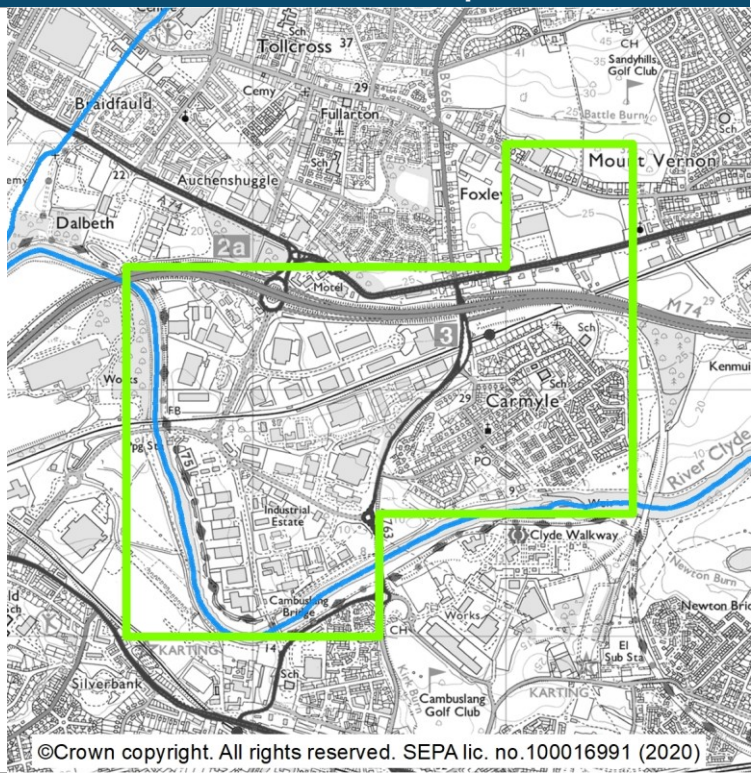
Flood risk management plan datasheet

Carmyle (target area 80001)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by the sewer flood risk assessment and for river flooding by the ongoing river model scheduled to be completed summer 2021. There is a long record of flooding in this target area.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
800011	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
800012	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
800013	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 8000101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Flood warning maintenance (Ref: 8000102)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 8000103)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 8000104)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water, South Lanarkshire Council under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

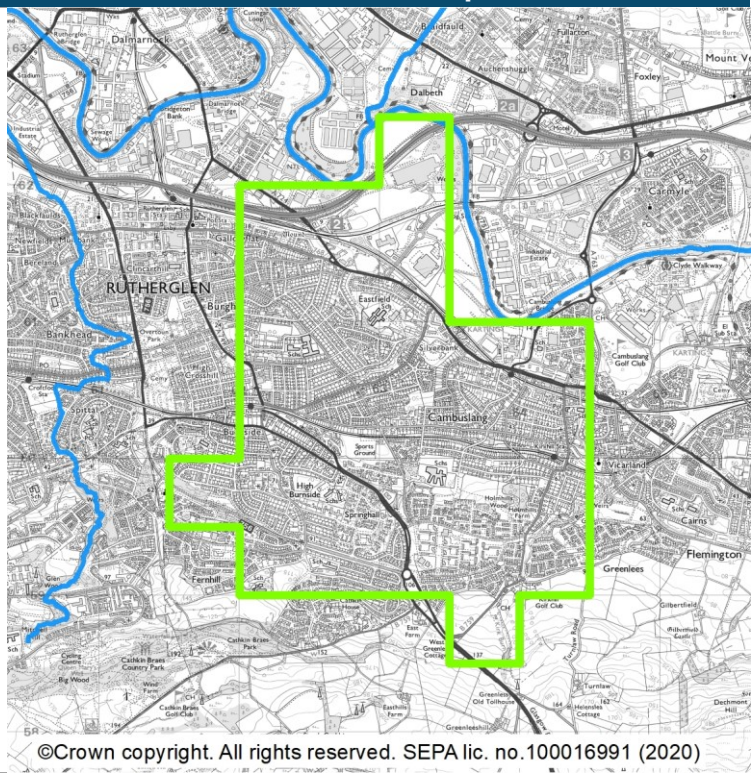
Flood risk management plan datasheet

Cambuslang West (target area 80002)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
800021	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
800022	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
800023	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 8000201)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 8000202)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 8000203)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

	Flood warning maintenance (Ref: 8000204)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

It has been identified that there are opportunities to work with Transport Scotland to manage flood risk issues in this area.

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

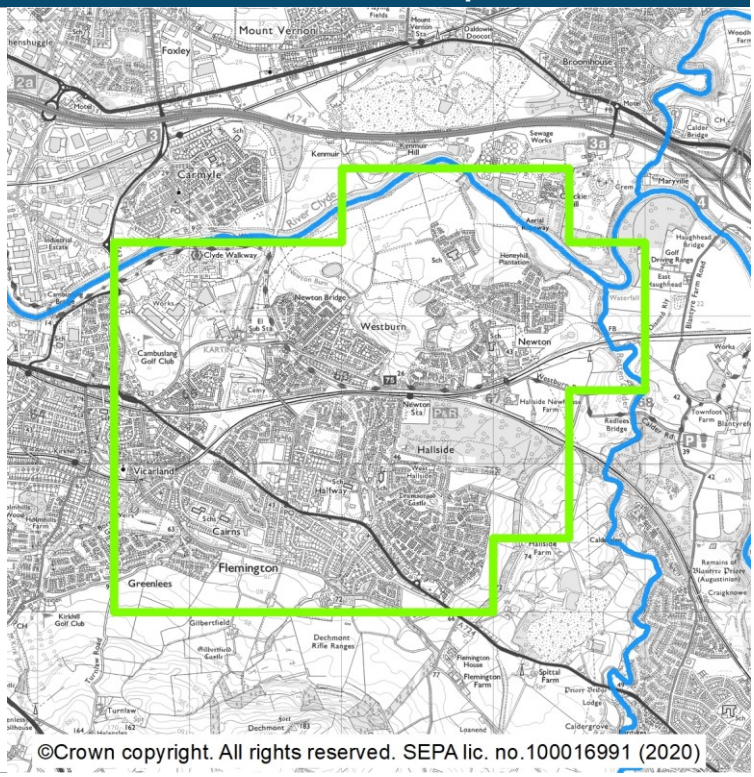
Flood risk management plan datasheet

Cambuslang East (target area 80003)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
800031	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
800032	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Clydesmill Flood Protection Scheme in the River Clyde
800033	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
800034	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 8000301)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. The performance and condition of the existing flood defences is to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 8000302)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 8000303)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

	Flood defence maintenance (Ref: 8000304)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 8000305)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

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

List of target areas

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)

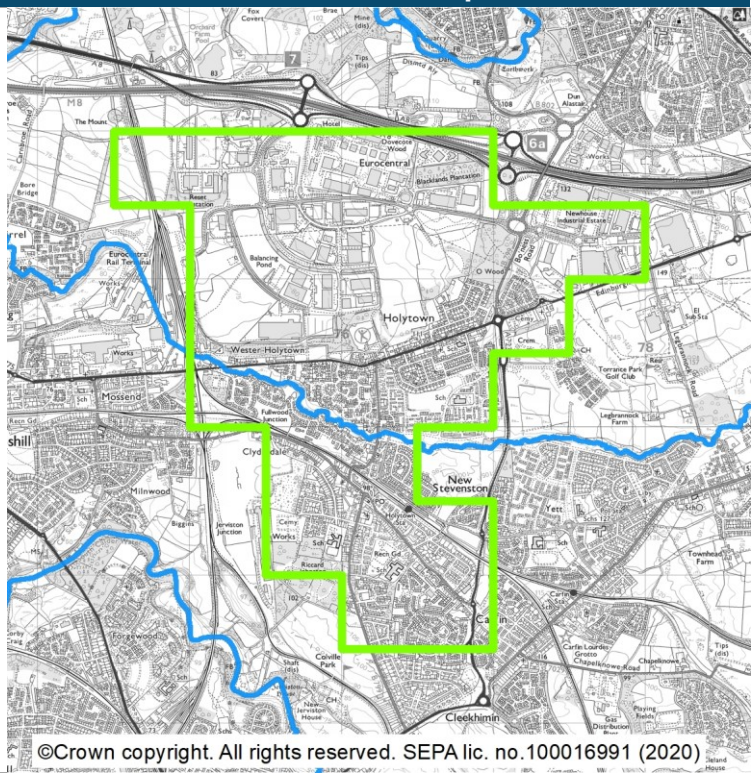
Flood risk management plan datasheet

Holytown and New Stevenston (target area 10)

Summary

Holytown and New Stevenston are villages located just north of Motherwell, in the North Lanarkshire Council 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for river and surface water flood risk by the Holytown Flood Study (stage 1). There are periodic records of flooding in this target area.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
101	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
102	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
103	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 1001)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 1002)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

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

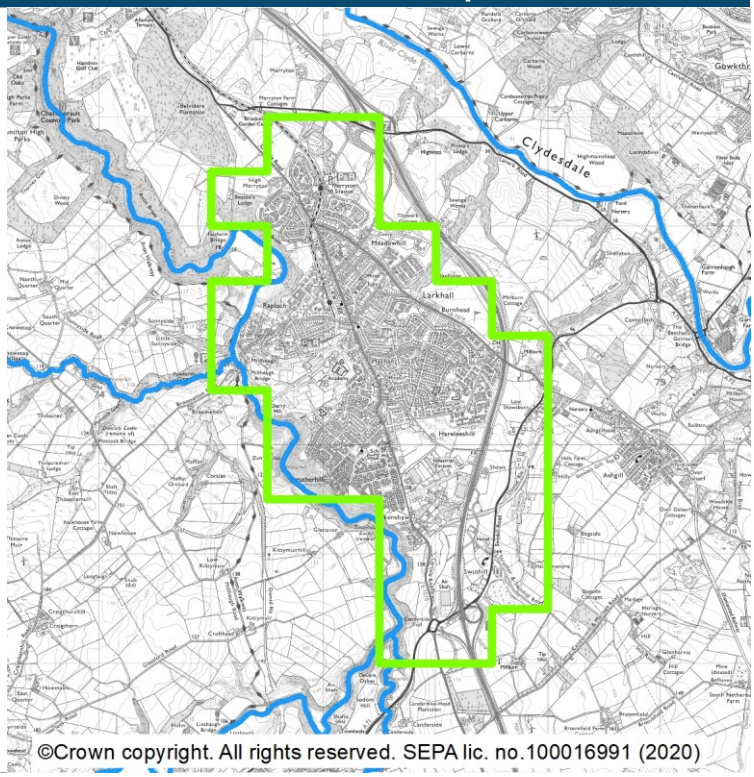
Flood risk management plan datasheet

Larkhall (target area 82)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood defence maintenance (Ref: 8201)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Flood study (existing flood defences) (Ref: 8202)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The study should focus primarily on the present performance of the Golf Gardens Flood Protection Scheme and 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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with SEPA.

	Surface water management plan (Ref: 8203)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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 other sources of flooding. The impacts of climate change on surface water flood risk should be considered.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

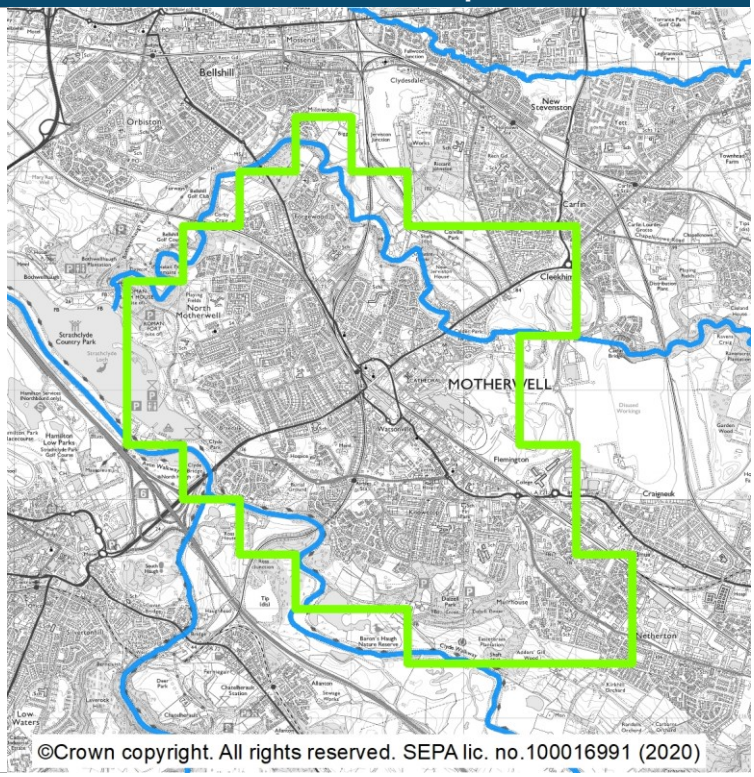
Flood risk management plan datasheet

Motherwell (target area 86)

Summary

The town of Motherwell is located south-east of Glasgow within the North Lanarkshire Council area. It also includes a small part of South Lanarkshire Council s 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 8601)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

	Flood study (options appraisal) (Ref: 8602)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with South Lanarkshire Council.

	Sewer flood risk assessment (Ref: 8603)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 8604)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

	Flood warning maintenance (Ref: 8605)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

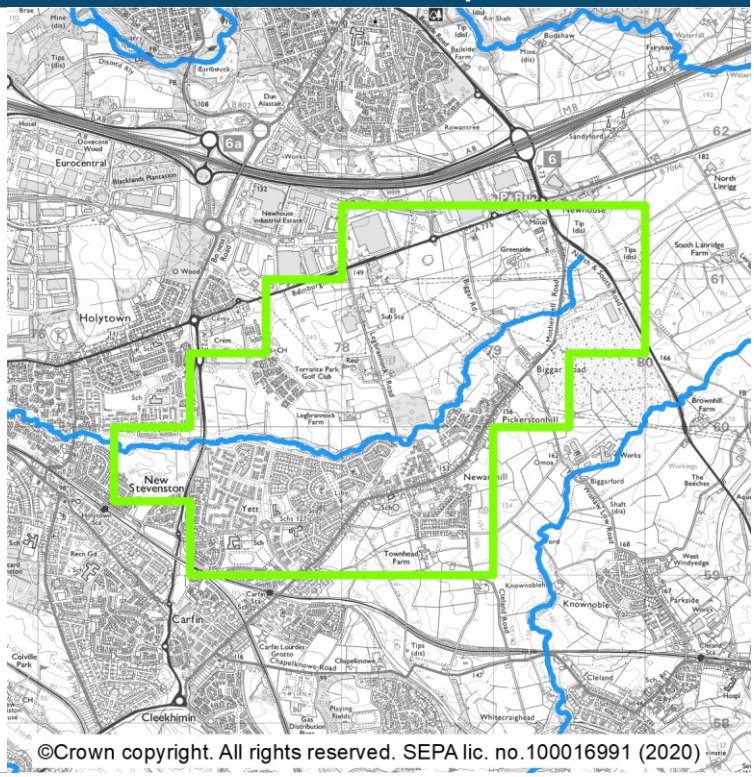
Flood risk management plan datasheet

Newarthill (target area 87)

Summary

The small village of Newarthill, is located three kilometres north-east of Motherwell within the North Lanarkshire Council 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 8701)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 8702)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

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

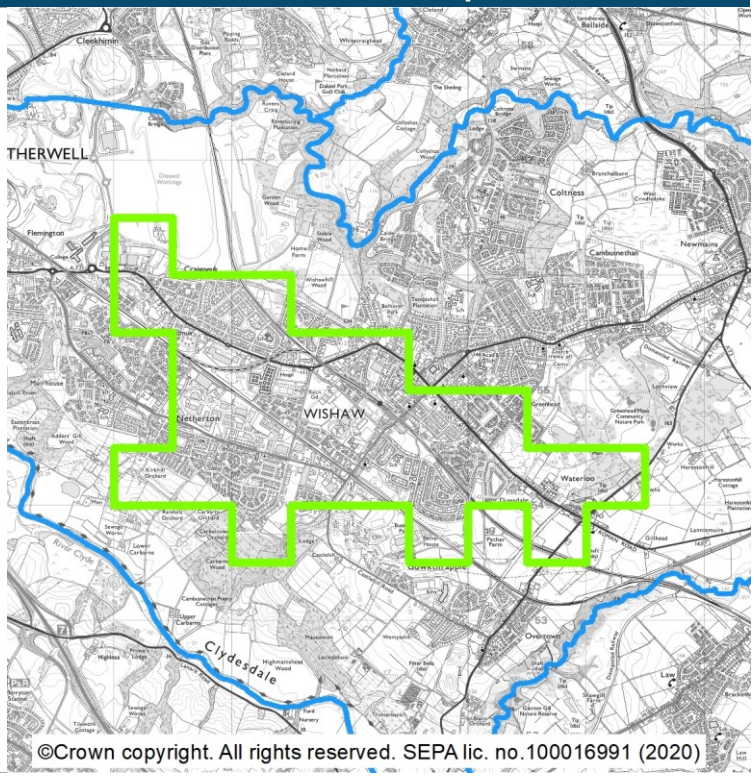
Flood risk management plan datasheet

Wishaw South (target area 94)

Summary

Wishaw South covers the south side of Wishaw, a large town located on the edge of the Clyde Valley. It is located within the North Lanarkshire local authority. 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 9401)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 9402)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

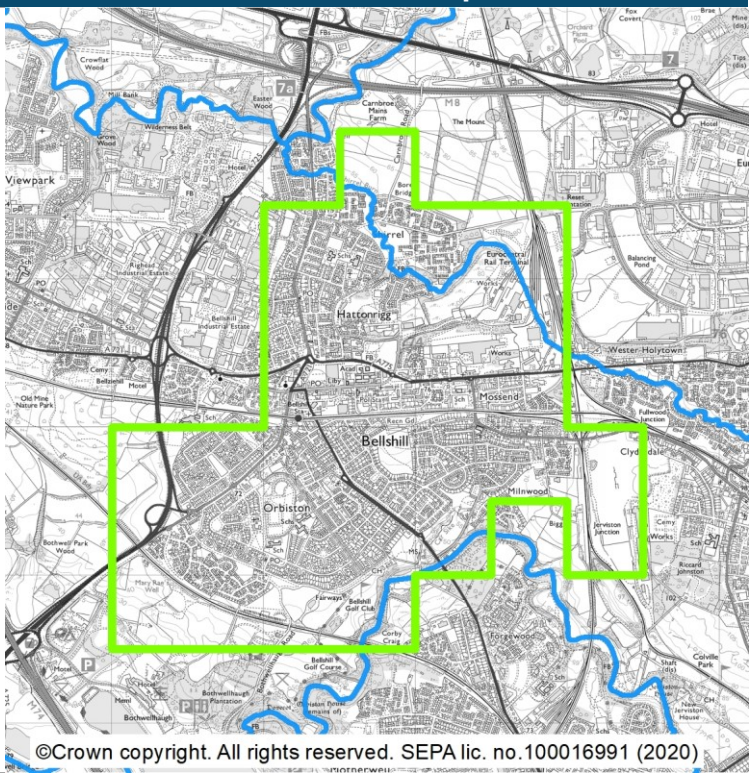
Flood risk management plan datasheet

Bellshill (target area 104)

Summary

Bellshill 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 10401)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 10402)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

	Flood study (Ref: 10403)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is North Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

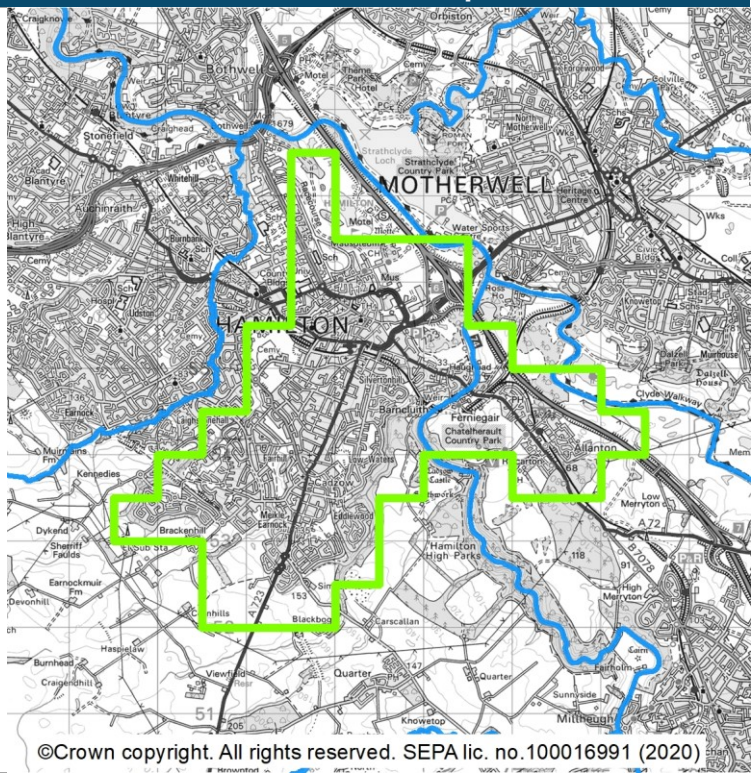
Flood risk management plan datasheet

Hamilton east (target area 112)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1121	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
1122	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
1123	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 11201)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Surface water management plan (Ref: 11202)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

	Sewer flood risk assessment (Ref: 11203)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood warning maintenance (Ref: 11204)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

02/11/12 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

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

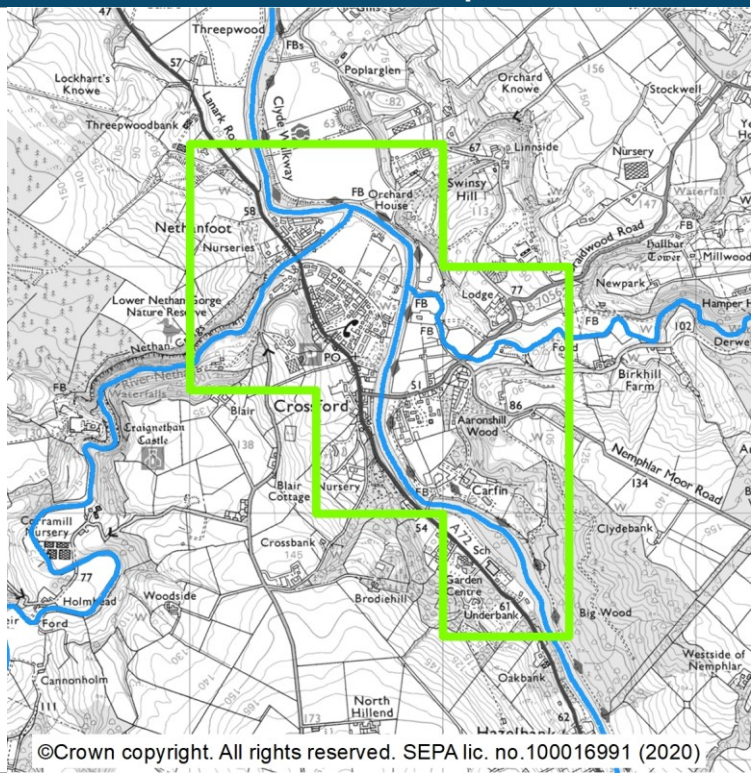
Flood risk management plan datasheet

Crossford (South Lanarkshire) (target area 29)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for river flooding by the ongoing River Clyde Flood Modelling and Mapping study and improved for surface water flooding by a sewer flood risk assessment. Understanding is also improved for river flooding by the flood warning scheme. There are periodic records of flooding in this target area.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 2901)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 2902)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

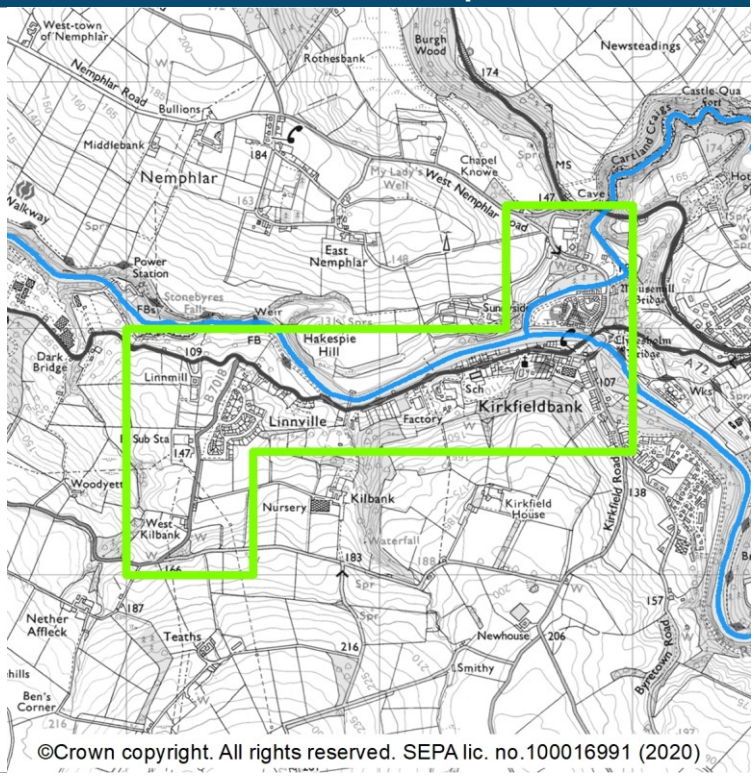
Flood risk management plan datasheet

Kirkfieldbank (target area 30)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 3001)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

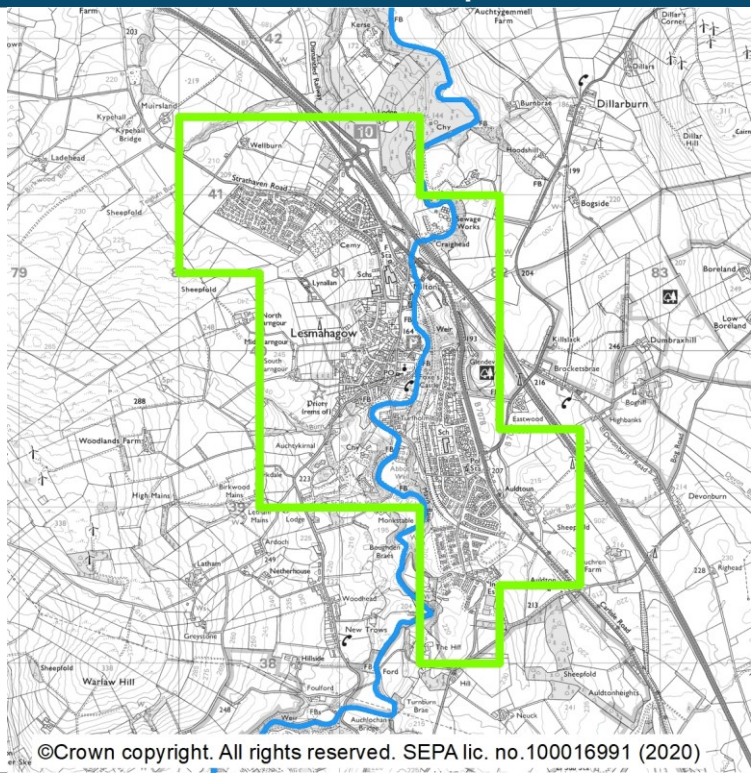
Flood risk management plan datasheet

Lesmahagow (target area 151)

Summary

Lesmahagow is a town in South Lanarkshire 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1511	Avoid flood risk	Avoid inappropriate development that increases flood risk in Lesmahagow
1512	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Lesmahagow
1513	Reduce flood risk	Reduce the risk of flooding in Lesmahagow

What actions are proposed for this area?

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

Actions proposed after June 2028

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

	Flood study (Ref: 15101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A flood study should be carried out to improve understanding of river flood risk in Lesmahagow. The impacts of climate change on flood risk should be evaluated. If flood risk is confirmed, scoping of the next steps should be completed.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Surface water management plan (Ref: 15102)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

02/11/13 (Shotts)

This area is designated as a Potentially Vulnerable Area due to flood risk in Allanton. The main source of flooding is groundwater. 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 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Allanton (target area 169)

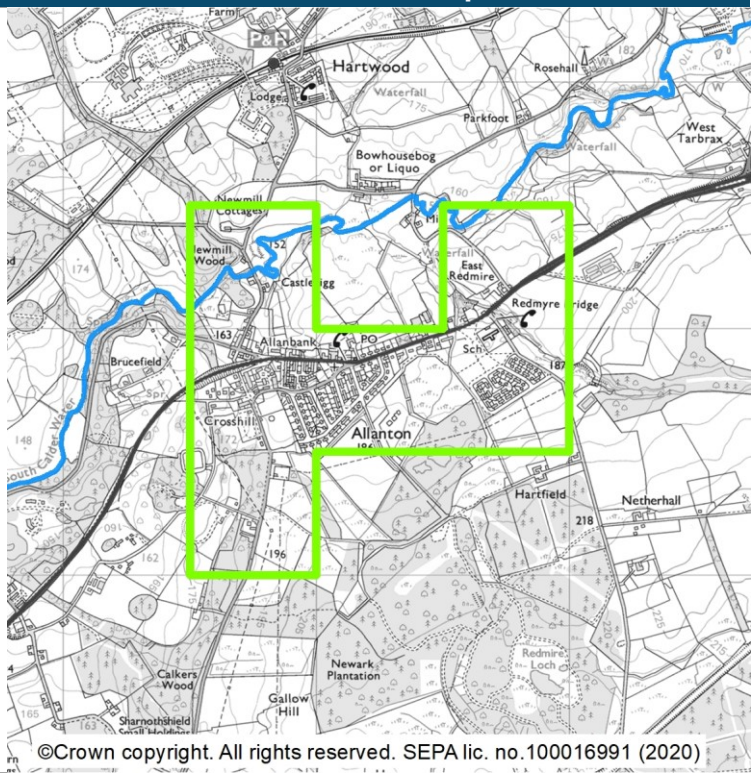
Flood risk management plan datasheet

Allanton (target area 169)

Summary

The village of Allanton lies between Wishaw and Shotts, which is within the North Lanarkshire Council 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 16901)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is North Lanarkshire Council in coordination with SEPA and Coal Authority.

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

What are the opportunities for joint working?

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

02/11/14 (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 area in this Potentially Vulnerable Area, which has been the focus of further assessment, this is identified below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Wishaw North	(target area 94001)

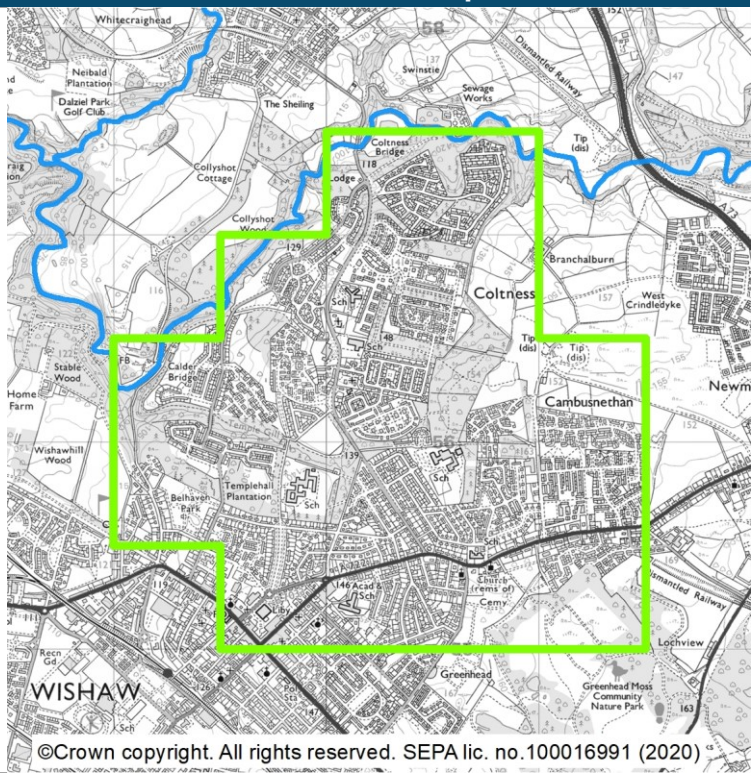
Flood risk management plan datasheet

Wishaw North (target area 94001)

Summary

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 Council 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
940011	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
940012	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
940013	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 9400101)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 9400102)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is North Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

02/11/15 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

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

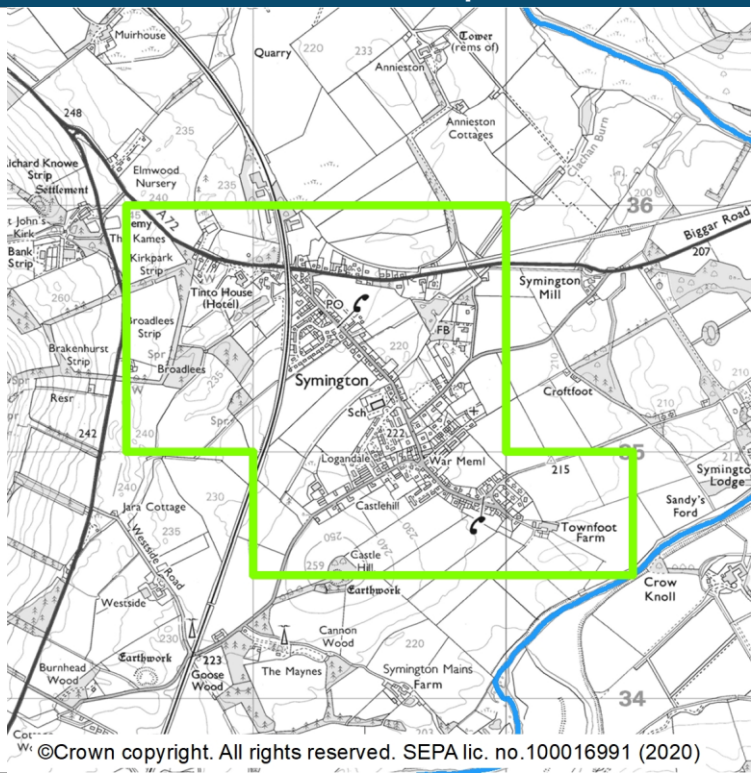
Flood risk management plan datasheet

Symington (target area 114)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources and 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1141	Avoid flood risk	Avoid inappropriate development that increases flood risk in Symington
1142	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Symington
1143	Reduce flood risk	Reduce the risk of flooding in Symington

What actions are proposed for this area?

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

Actions proposed after June 2028

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

	Data collection (Ref: 11401)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	This may include data collection and monitoring to improve the confidence in flood sources, mechanisms and risk. A review may be required to assess the need for rain and/or river gauges. Post flood surveys may be required to collect data on flooding mechanisms, risk and damage caused.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 11402)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A flood study should be carried out to improve understanding of flood risk in Symington. This should include a review of the 2009 flood study. The impacts of climate change on flood risk should be evaluated. If flood risk is confirmed, scoping of the next steps should be completed.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

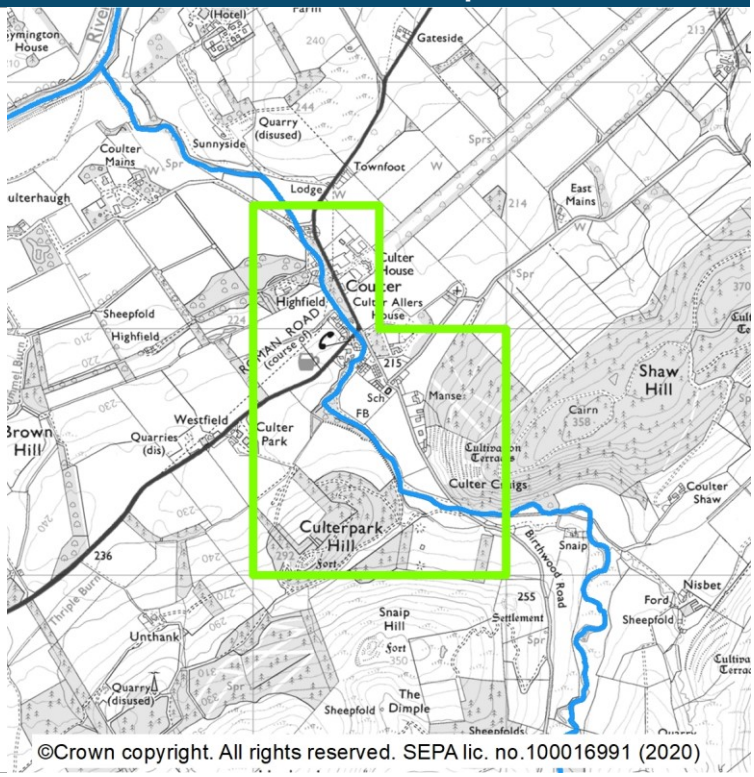
Flood risk management plan datasheet

Coulter (target area 115)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1151	Avoid flood risk	Avoid inappropriate development that increases flood risk in Coulter
1152	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Coulter
1153	Reduce flood risk	Reduce the risk of flooding in Coulter

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 11501)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	A 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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

02/11/16 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

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

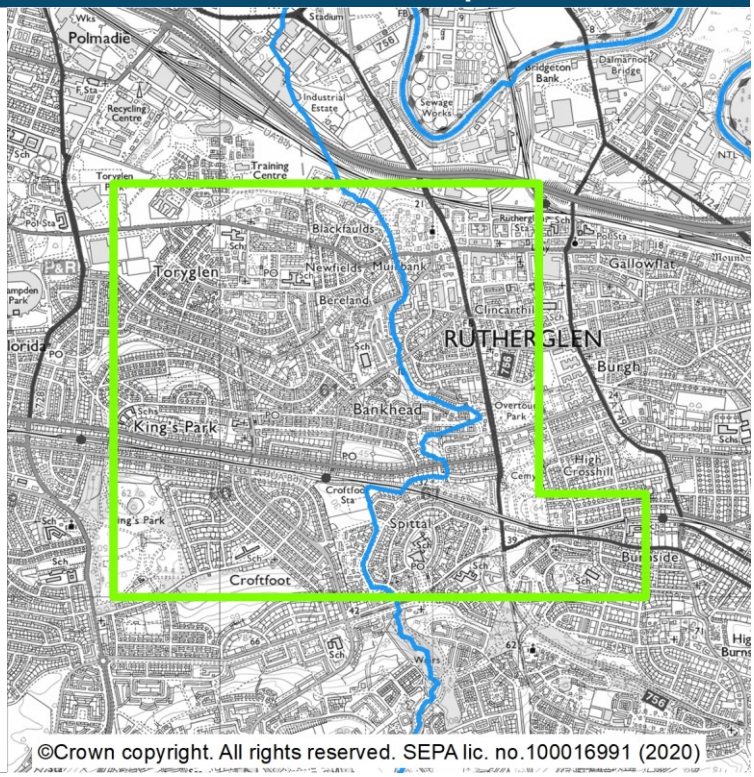
Flood risk management plan datasheet

Rutherglen (target area 43001)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
430011	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
430012	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Cityford Burn Culvert Flood Protection Scheme
430013	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
430014	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works implementation (Ref: 4300101)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Glasgow City Council to implement surface water management phase 4 measures in Croftfoot and King's Park.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood defence maintenance (Ref: 4300102)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 4300103)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 4300104)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

	Flood defence maintenance (Ref: 4300105)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	South Lanarkshire Council is to continue to maintain the existing Cityford Burn Culvert Flood Protection Scheme.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Flood study (existing flood defences) (Ref: 4300106)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The study should focus primarily on reviewing the performance of the Cityford Burn Culvert Flood Protection Scheme and 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.
Coordination	Action delivery lead is South Lanarkshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

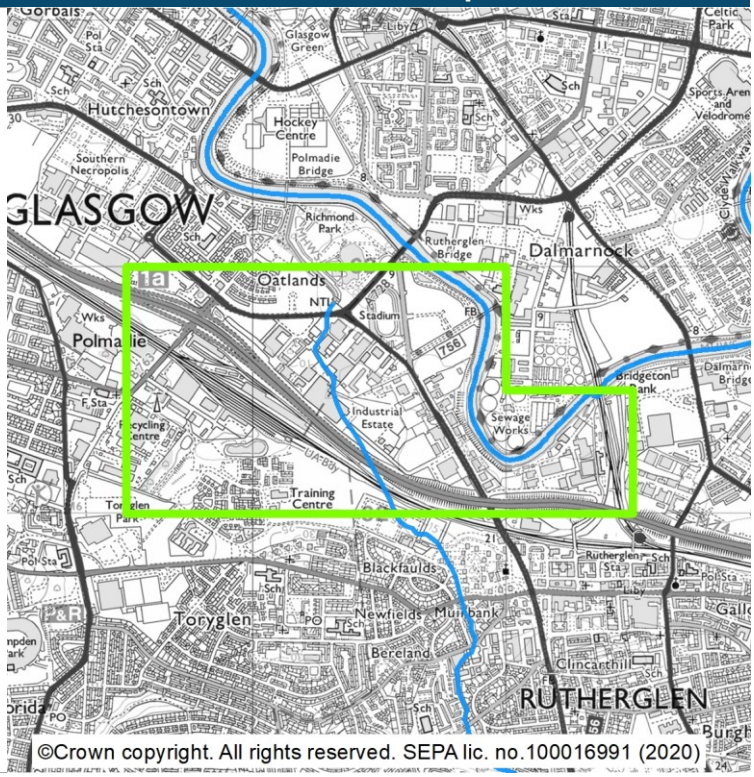
Flood risk management plan datasheet

Polmadie (target area 43002)

Summary

Polmadie is mainly an industrial zone of Glasgow and it is within the Glasgow City and South Lanarkshire local authority 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 4300201)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood study (Ref: 4300202)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Flood study (Ref: 4300203)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Sewer flood risk assessment (Ref: 4300204)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood warning maintenance (Ref: 4300205)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Clyde flood warning scheme. The scheme should be investigated for improvement and/or recalibration.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

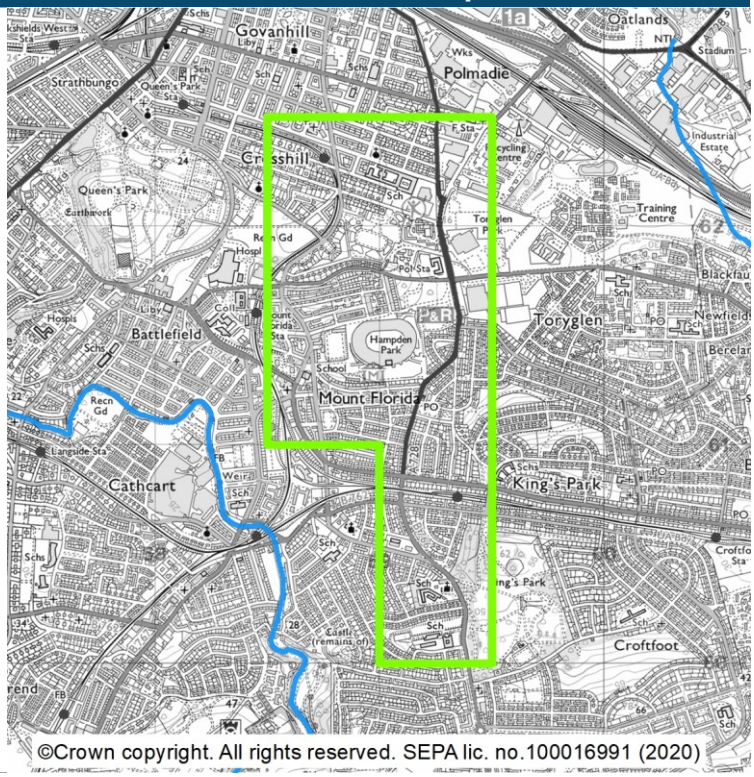
Flood risk management plan datasheet

Mount Florida (target area 43003)

Summary

Mount Florida is an area located to the south east of Glasgow and is located within the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water by the SE Glasgow Surface Water Management Plan (2019) and sewer flood risk assessment. There is a long record of flooding in this target area.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
430031	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
430032	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of surface water management measures
430033	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
430034	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works implementation (Ref: 4300301)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Glasgow City Council to implement surface water management phase 4 measures in Croftfoot, Kings Park and Overwood Drive / Aitkenhead Road.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Sewer flood risk assessment (Ref: 4300302)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 4300303)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

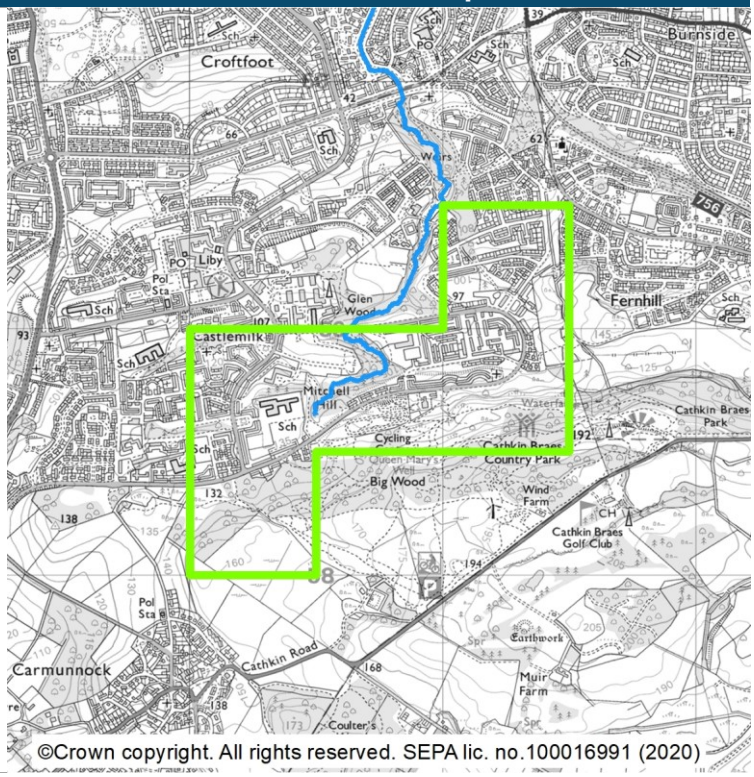
Flood risk management plan datasheet

Castlemilk East (target area 43004)

Summary

The Castlemilk district lies to the south of Glasgow. It is within the City of Glasgow and South Lanarkshire local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by the surface water management plan and Culverted Watercourses study. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
430041	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
430042	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
430043	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 4300401)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire.

	Community engagement (Ref: 4300402)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire.

	Sewer flood risk assessment (Ref: 4300403)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council, South Lanarkshire Council and Scottish Water will continue to work in partnership under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

List of target areas

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)

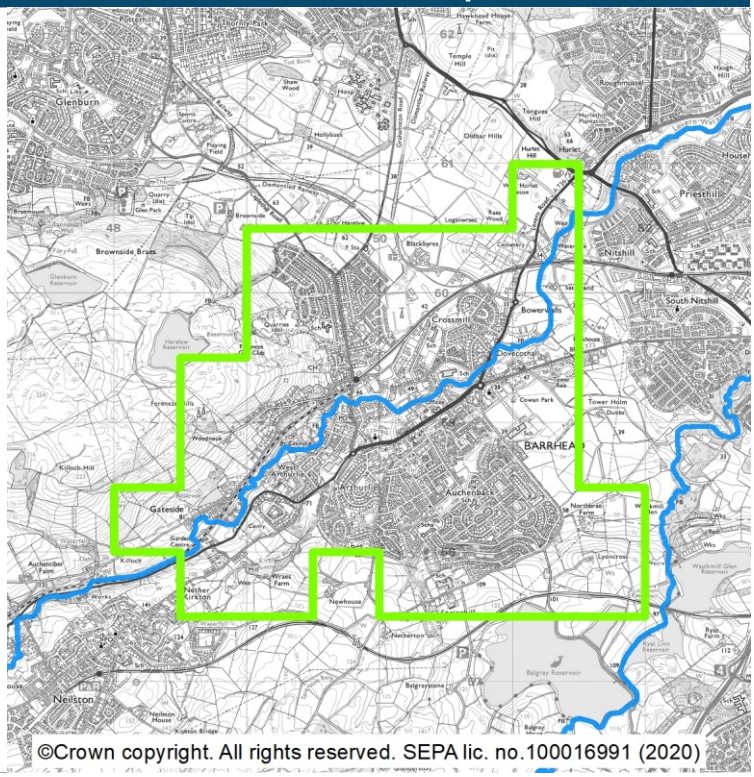
Flood risk management plan datasheet

Barrhead (target area 3)

Summary

Barrhead is a town located south of Glasgow and within East Renfrewshire local authority 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
31	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
32	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
33	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 301)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is East Renfrewshire Council in coordination with SEPA.

	Sewer flood risk assessment (Ref: 302)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

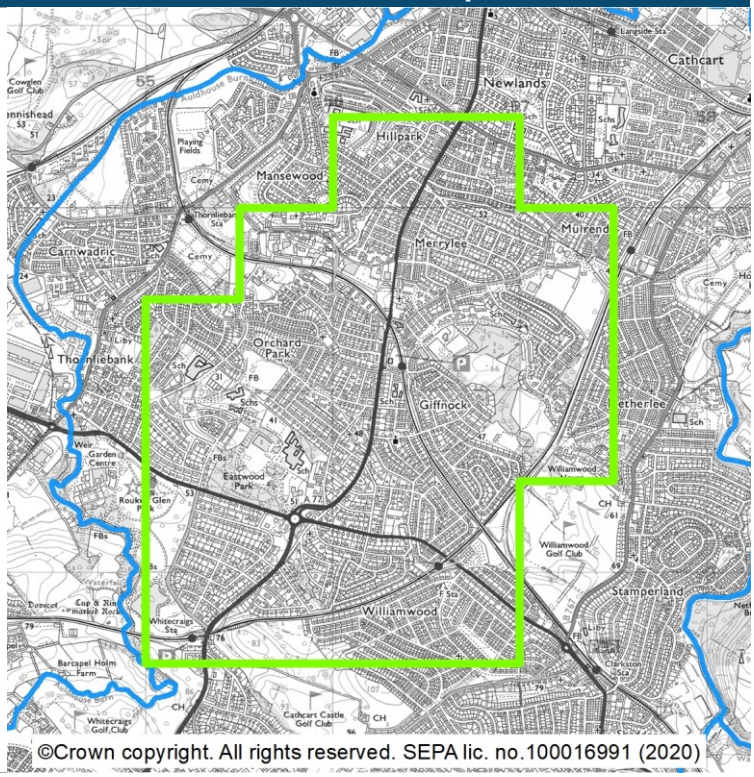
Flood risk management plan datasheet

Giffnock and Merrylee (target area 9)

Summary

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 local authorities. 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 901)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council.

	Flood study (Ref: 902)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is East Renfrewshire Council in coordination with Glasgow City Council.

	Sewer flood risk assessment (Ref: 903)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water and East Renfrewshire Council under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

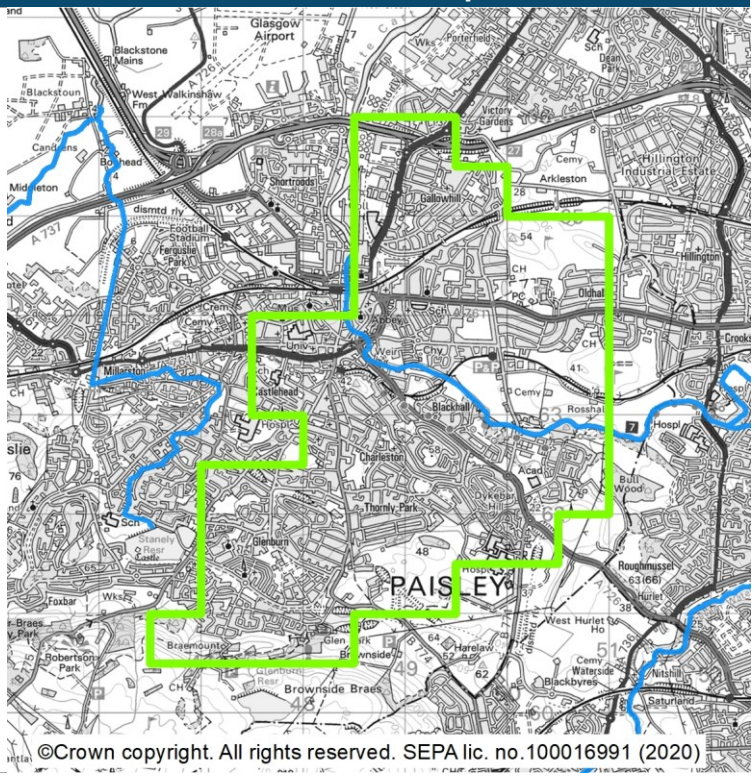
Flood risk management plan datasheet

Paisley east (target area 12)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 1201)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water, Glasgow City Council, East Renfrewshire Council and SEPA.

	Sewer flood risk assessment (Ref: 1202)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 1203)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

	Flood study (Ref: 1204)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. The performance and condition of the existing flood defences is to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood defence maintenance (Ref: 1205)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Maintenance to the Moredun Flood Protection Scheme should continue and updates to the maintenance regime made based on the findings of the flood study.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 1206)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should investigate a potential extension to the White Cart flood warning scheme to include this area.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

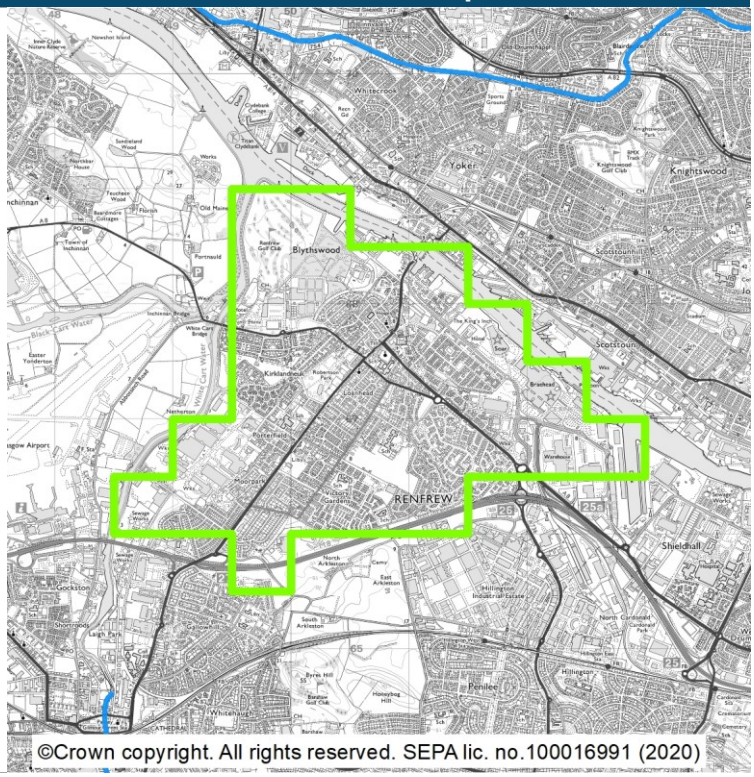
Flood risk management plan datasheet

Renfrew (target area 13)

Summary

Renfrew lies west of Glasgow on White Cart Water and the River Clyde within Renfrewshire, Glasgow City and West Dunbartonshire 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 1301)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Adaptation plan (Ref: 1302)
Action	Information on climate change is to be used to develop an adaptation plan to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Renfrew North Flood Protection Scheme 2007 adaptation plan.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood defence maintenance (Ref: 1303)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 1304)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 1305)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

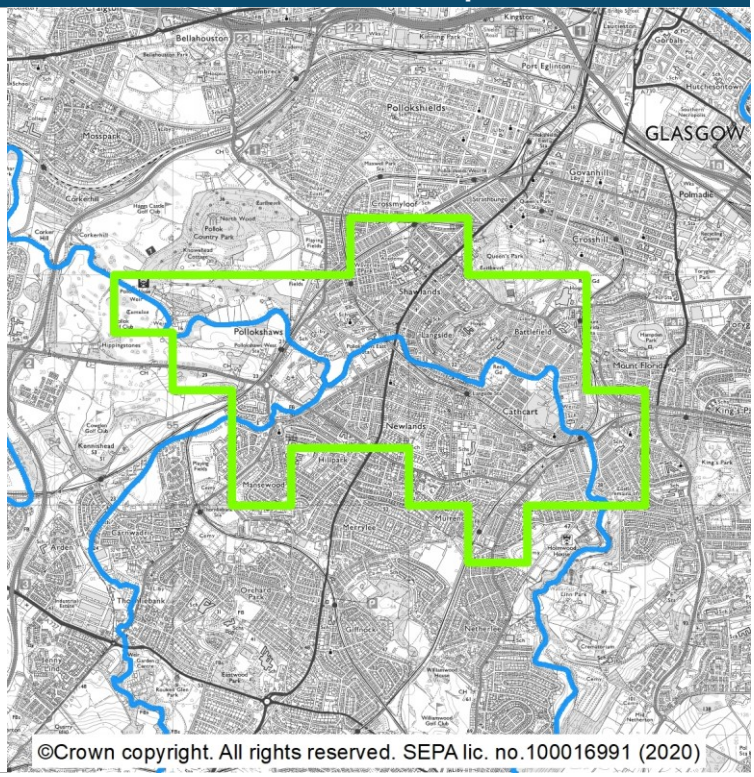
Flood risk management plan datasheet

Cathcart & Shawlands (target area 41)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for river flooding by the 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. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
411	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
412	Avoid flood risk	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
413	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in in this target area
414	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 4101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council, SEPA and Scottish Water.

	Sewer flood risk assessment (Ref: 4102)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 4103)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Glasgow City Council to develop a surface water management plan for this area (including Newlands). This should consider the outputs of Scottish Waters sewer flood risk assessment. The potential for natural flood management should be investigated.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council, SEPA and Scottish Water.

	Flood study (existing flood defences) (Ref: 4104)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council, SEPA and Scottish Water.

	Flood defence maintenance (Ref: 4105)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 4106)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the White Cart flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council an Scottish Water will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

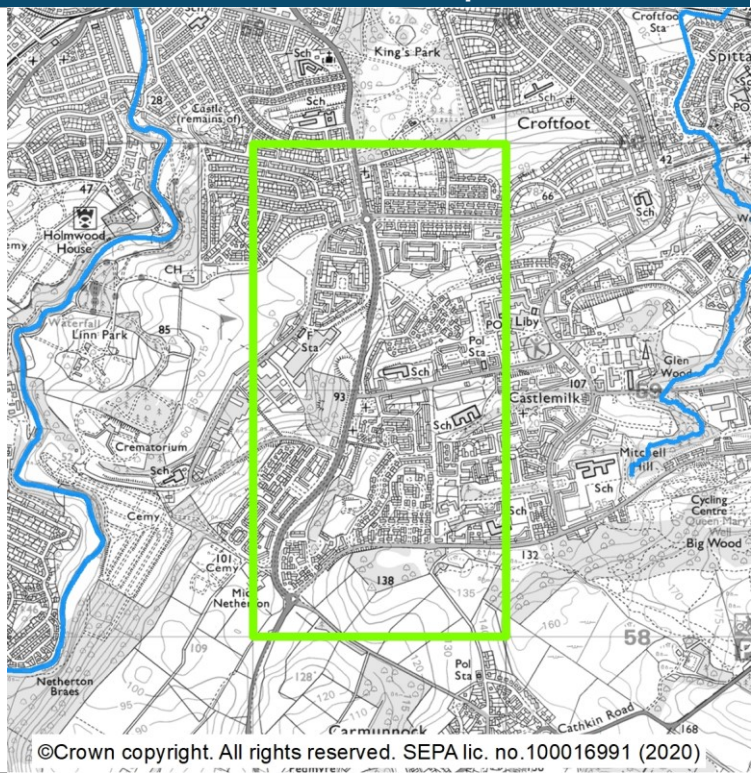
Flood risk management plan datasheet

Castlemilk West (target area 42)

Summary

Castlemilk West is a residential area of south Glasgow. It is in the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by the surface water management plan and Culverted Watercourses study. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
421	Avoid flood risk	Avoid inappropriate development that increases flood risk in Castlemilk West
422	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Castlemilk West
423	Reduce flood risk	Reduce the risk of surface water flooding in Castlemilk West

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 4201)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Community engagement (Ref: 4202)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Sewer flood risk assessment (Ref: 4203)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

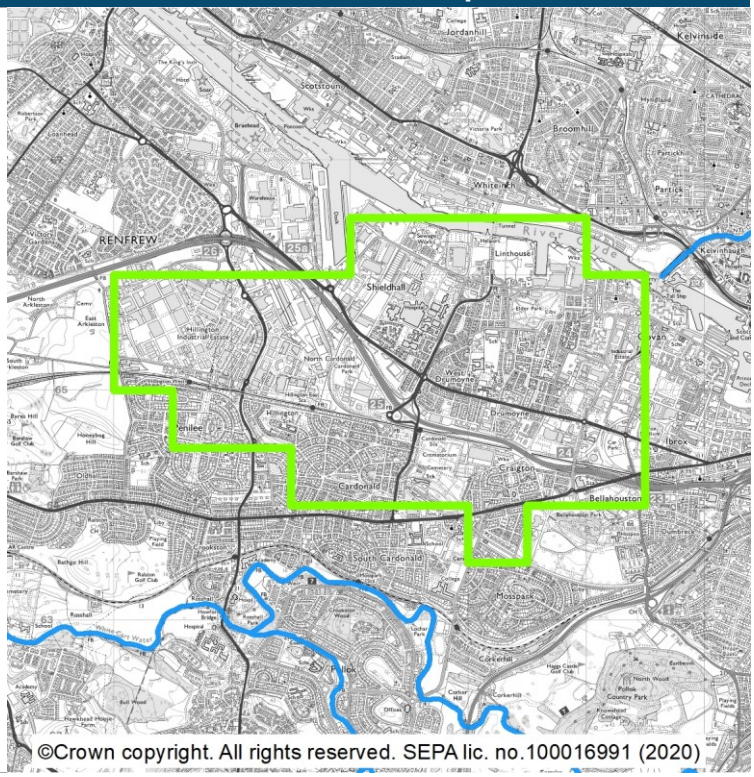
Flood risk management plan datasheet

Hillington and Cardonald (target area 55)

Summary

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 local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water by the surface water management plan and sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 5501)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Glasgow City Council to complete the Hillington and Cardonald surface water management preferred option detail design for Phase 3 of the works.
Coordination	Action delivery lead is Glasgow City Council in coordination with Renfrewshire Council, Scottish Water and SEPA.

	Flood scheme or works implementation (Ref: 5502)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Glasgow City Council to implement surface water management phase 3 measures in Hillington and Cardonald.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water.

	Community engagement (Ref: 5503)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 5504)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 5505)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water and Renfrewshire Council under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

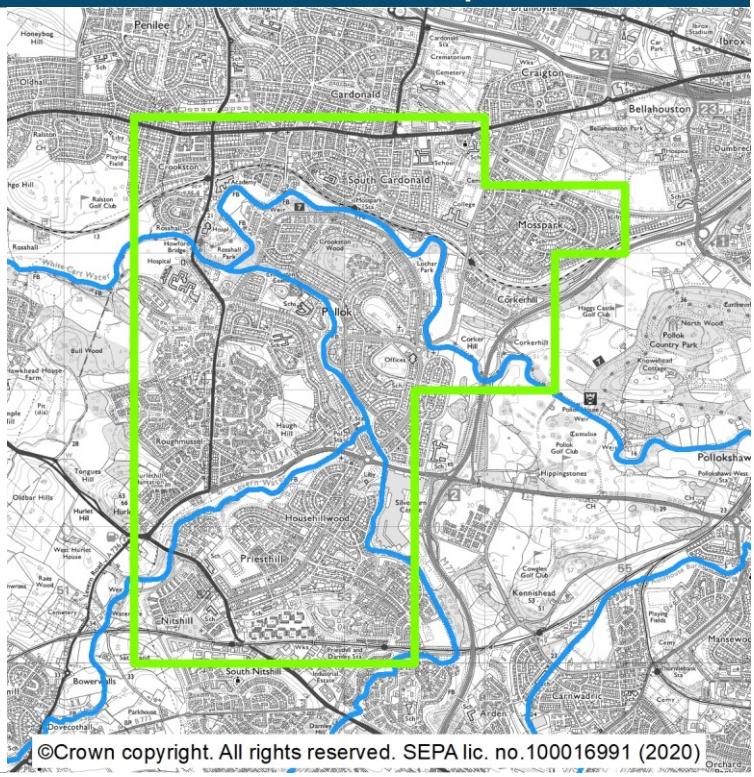
Flood risk management plan datasheet

Pollok (target area 56)

Summary

The suburban area of Pollok is located in south-west Glasgow. It is primarily in the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for river flooding by the development of phase 3 of the White Cart Flood Protection Scheme and for surface water by the sewer flood risk assessment. Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
561	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
562	Avoid flood risk	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
563	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
564	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (existing flood defences) (Ref: 5601)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Study of Brock Burn & Levern Water Flood Protection Scheme 1991 and White Cart Flood Protection Scheme 2002.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood defence maintenance (Ref: 5602)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Maintenance to the Brock Burn & 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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 5603)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 5604)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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 Waters 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.
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood warning maintenance (Ref: 5605)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the White Cart flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

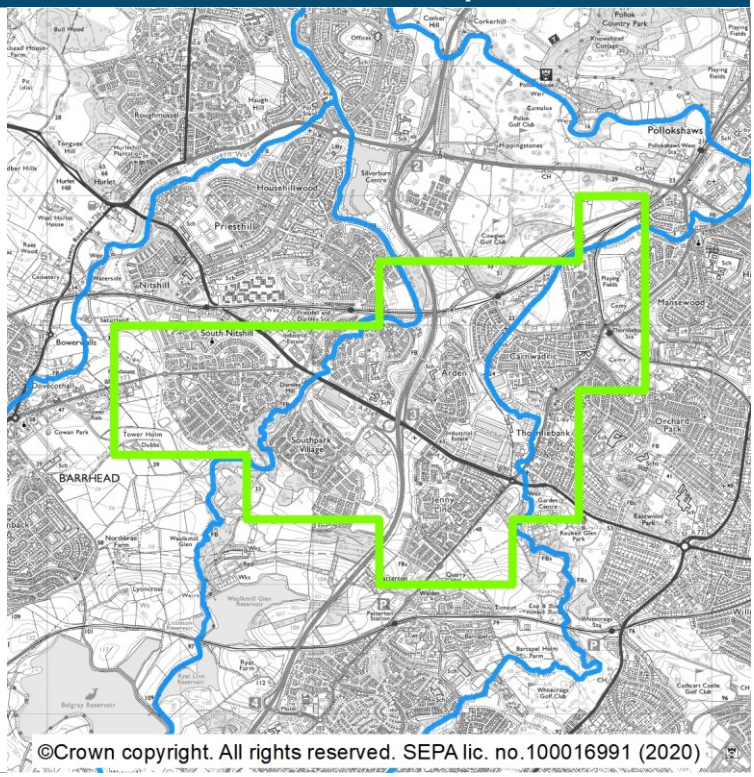
Flood risk management plan datasheet

Thornliebank (target area 57)

Summary

Thornliebank is a suburb in the south of Glasgow and located within the Glasgow City and East Renfrewshire local authority 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 5701)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with East Renfrewshire Council and SEPA.

	Flood study (existing flood defences) (Ref: 5702)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The study should focus primarily on reviewing the performance of the White Cart Flood Protection Scheme phase 1 & 2.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Flood defence maintenance (Ref: 5703)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 5704)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 5705)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with SEPA.

	Surface water management plan (Ref: 5706)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	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.
Coordination	Action delivery lead is East Renfrewshire Council in coordination with SEPA, Scottish Water and Glasgow City Council.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water and East Renfrewshire Council under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects, to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.
There is potential to work with SEPA's River Basin Management team to improve the physical condition of the water environment.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

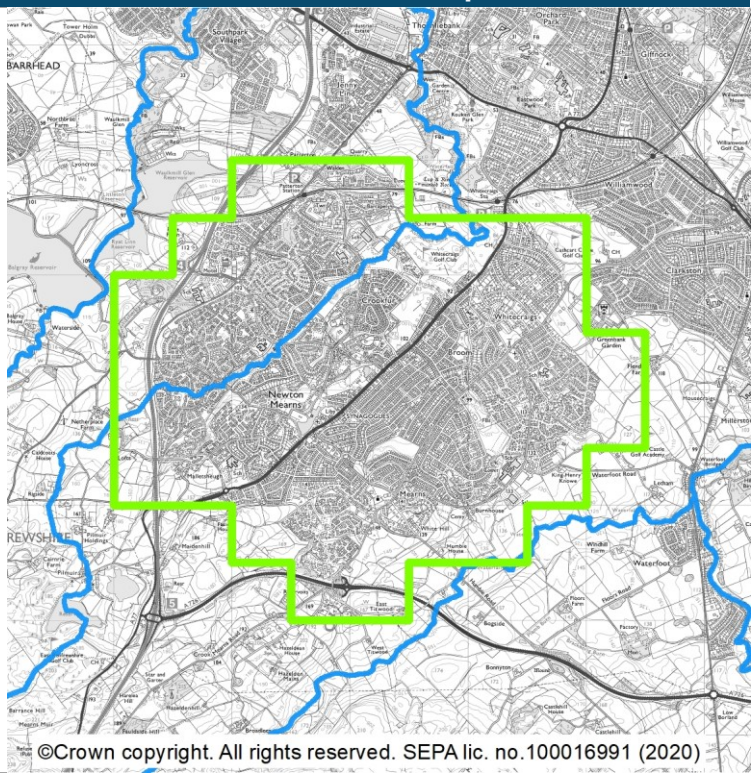
Flood risk management plan datasheet

Newton Mearns (target area 58)

Summary

The suburban town of Newton Mearns is located south of Glasgow and within the East Renfrewshire Council local authority 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 5801)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood study (Ref: 5802)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Building on from the Surface Water Management Plan and Scottish Waters 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.
Coordination	Action delivery lead is East Renfrewshire Council in coordination with Scottish Water and SEPA.

	Community engagement (Ref: 5803)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Community Engagement should be linked to the findings of the flood study.
Coordination	Action delivery lead is East Renfrewshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

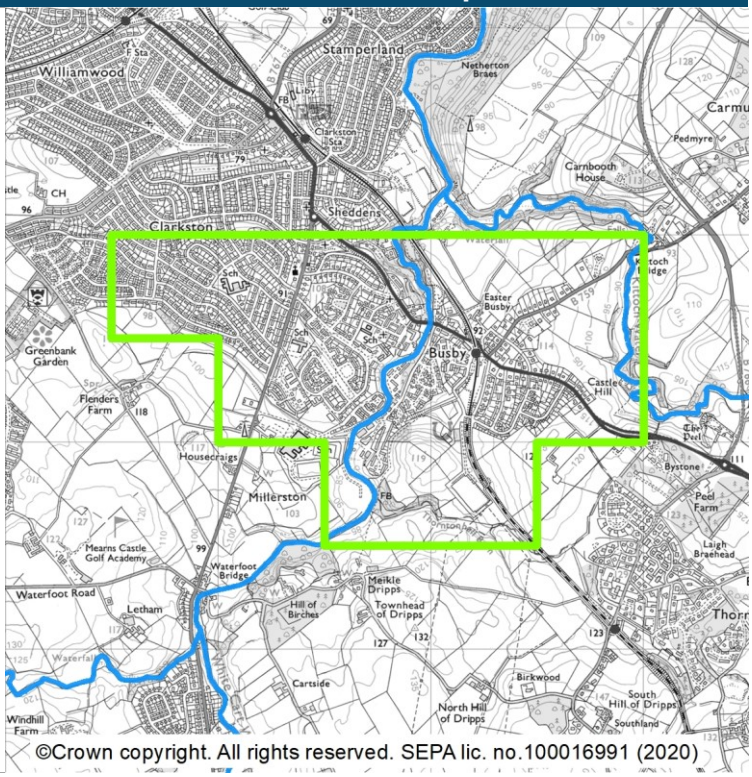
Flood risk management plan datasheet

Busby (target area 59)

Summary

Busby is located south of Glasgow on the White Cart Water. The area is located primarily within East Renfrewshire with small areas of Glasgow City and South Lanarkshire local authority areas. 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 5901)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Surface water management plan (Ref: 5902)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Renfrewshire Council in coordination with Scottish Water.

	Flood study (Ref: 5903)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is East Renfrewshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

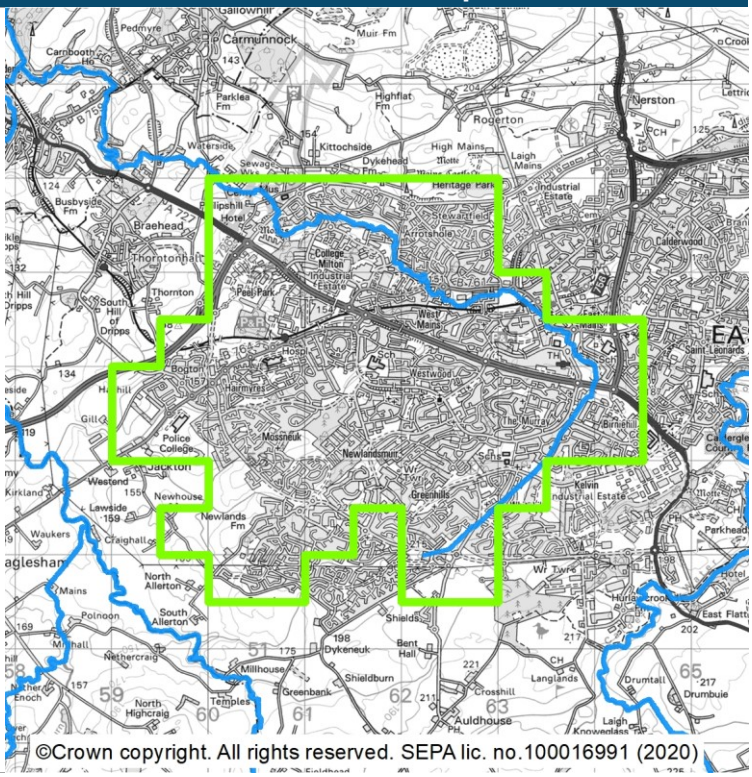
Flood risk management plan datasheet

East Kilbride west (target area 109)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 10901)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 10902)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is South Lanarkshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

It has been identified that there are opportunities to work with Transport Scotland to manage flood risk issues in this area.

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

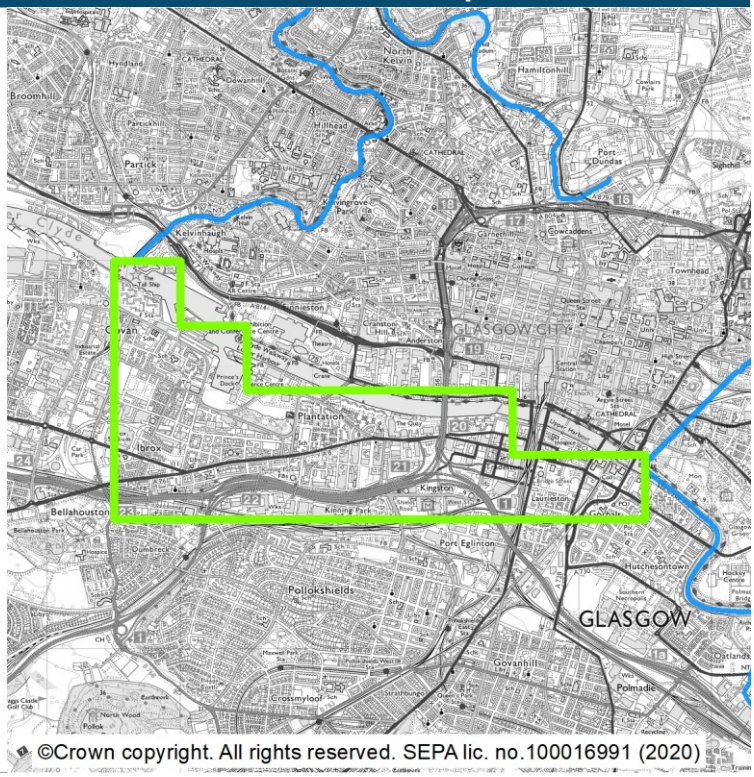
Flood risk management plan datasheet

Plantation (target area 44001)

Summary

Plantation is located in Glasgow, along the south bank of the River Clyde. It is in the Glasgow City local authority 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
440011	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
440012	Improve data and understanding	Improve data and understanding of coastal flooding in this target area
440013	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
440014	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 4400101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Sewer flood risk assessment (Ref: 4400102)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 4400103)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

	Flood warning maintenance (Ref: 4400104)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 4400105)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

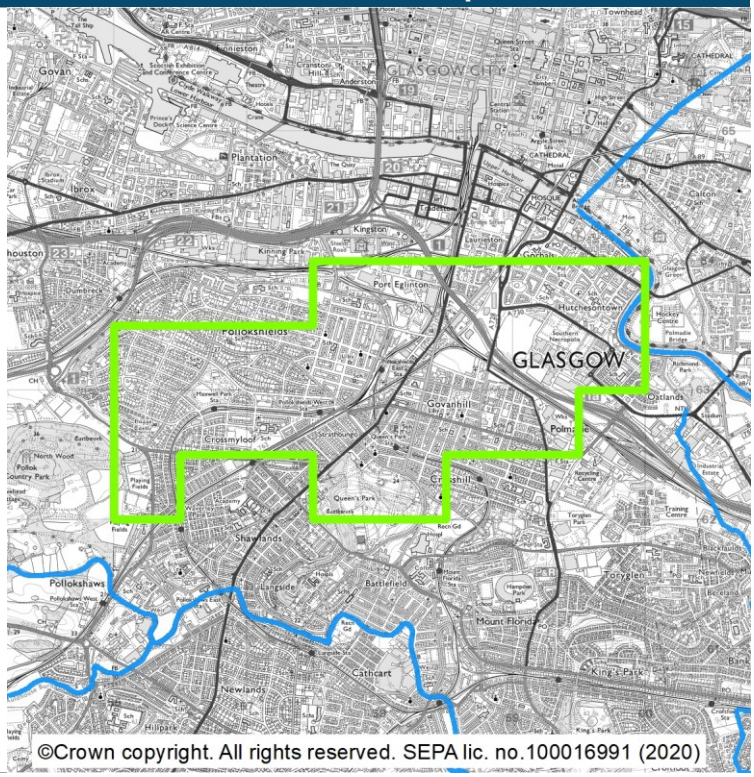
Flood risk management plan datasheet

Pollokshields (target area 44002)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment is improved for surface water flooding by the sewer flood risk assessment and for river flooding by the tidal Clyde model (December 2020). Over recent years this target area has not experienced any significant rainfall events and therefore the actual risk of surface water flooding is higher than suggested by any observed flooding since 2015.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
440021	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
440022	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
440023	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 4400201)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Glasgow City Council in coordination with South Lanarkshire and SEPA.

	Sewer flood risk assessment (Ref: 4400202)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 4400203)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	
Coordination	Action delivery lead is Glasgow City Council in coordination with Scottish Water and SEPA.

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

What are the opportunities for joint working?

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

Glasgow City Council will continue to work in partnership with Scottish Water under the auspices of the Metropolitan Glasgow Strategic Drainage Partnership to sustainably drain Glasgow. SEPA and Glasgow City Council will look to enhance partnership working to improve the understanding of current and future flood risk with the aim of supporting long term sustainable communities.

SEPA will look to enhance coordinated working in this target area through placemaking partnerships. This will look at land use planning and flooding aspects to improve the current and future understanding of flood risk with the aim of identifying long term improvements for communities.

Scottish Water will continue to work in partnership with local authorities, SEPA and other relevant authorities to support long term sustainable drainage planning through the Metropolitan Glasgow Strategic Drainage Partnership.

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

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

List of target areas

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

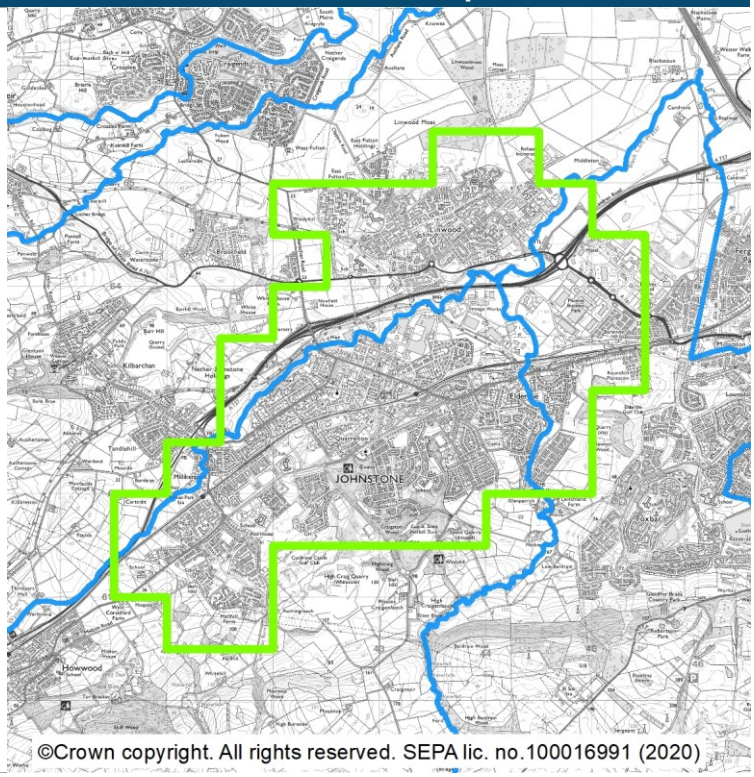
Flood risk management plan datasheet

Johnstone and Linwood (target area 11)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 1101)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. The performance and condition of the existing flood defences is to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood study (options appraisal) (Ref: 1102)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Following on the outputs of Jonhstone flood study and surface water management plan, Renfrewshire Council should identify options to manage flood risk in Jonhstone.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 1103)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 1104)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

	Surface water management plan (Ref: 1105)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

	Flood defence maintenance (Ref: 1106)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

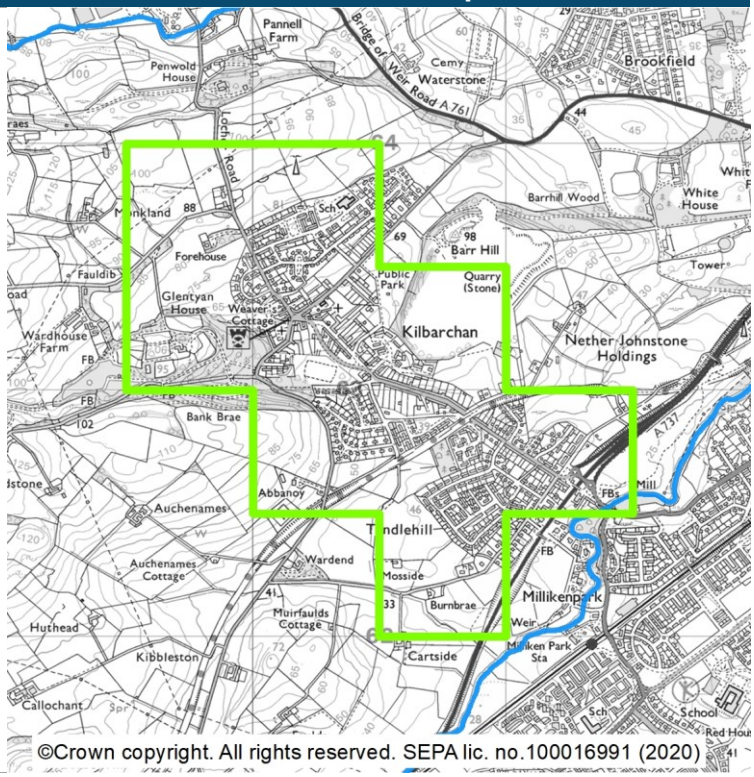
Flood risk management plan datasheet

Kilbarchan (target area 15)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
151	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
152	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
153	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 1501)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 1502)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

	Flood study (Ref: 1503)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. An understanding of opportunities for catchment management is to be developed.
Action detail	Renfrewshire Council to carry out a natural flood management study to further investigate the potential benefit for sediment management at Kilbarchan.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 1504)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Renfrewshire Council to carry out a flood study to address risk from the Kilbarchan Burn.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood study (options appraisal) (Ref: 1505)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

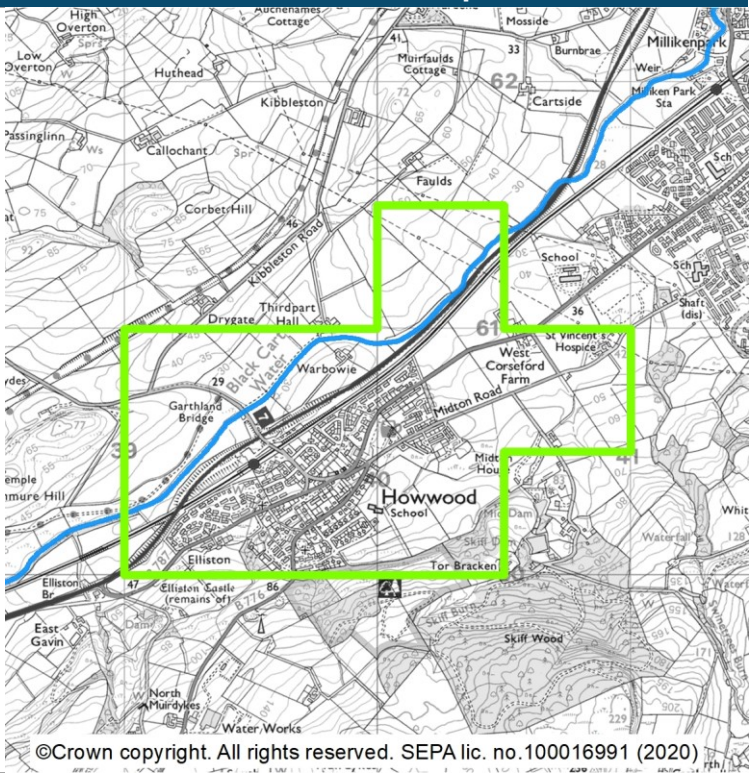
Flood risk management plan datasheet

Howwood (target area 40)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Data collection (Ref: 4001)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 4002)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

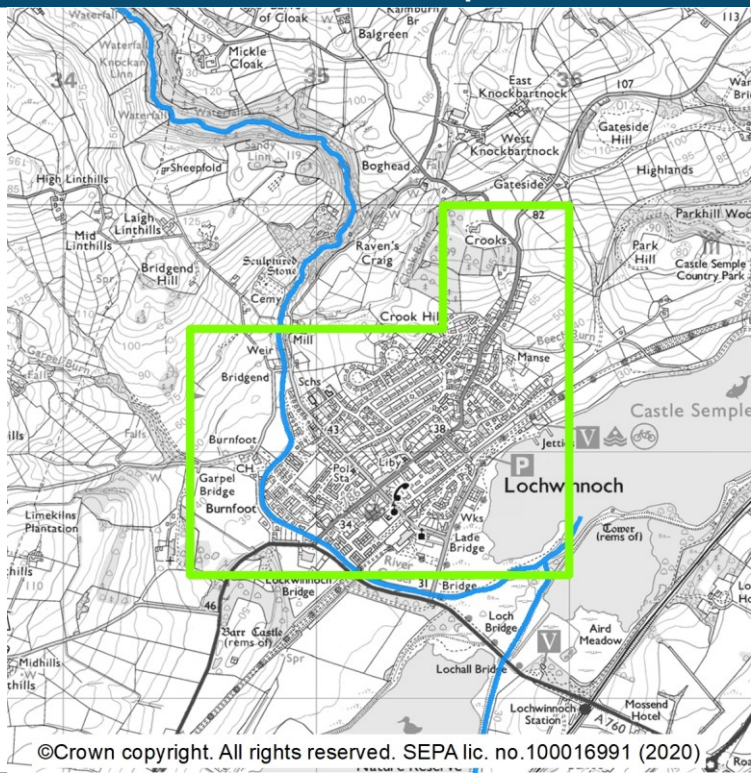
Flood risk management plan datasheet

Lochwinnoch (target area 83)

Summary

Lochwinnoch is a village located on the banks of both Castle Semple 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 8301)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Renfrewshire Council to carry out a flood study to address risk from the River Calder and tributaries.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 8302)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. An understanding of opportunities for catchment management is to be developed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood study (options appraisal) (Ref: 8303)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

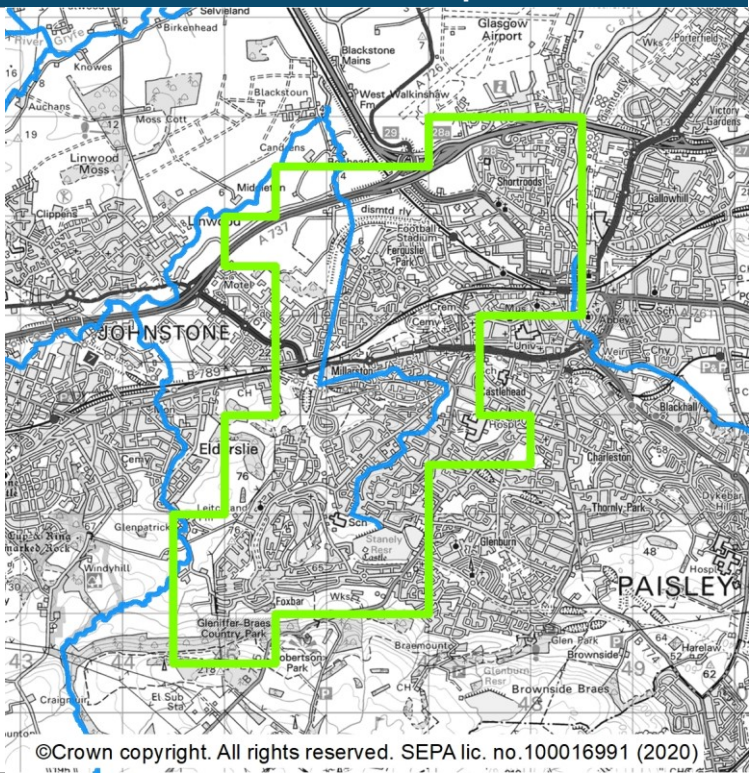
Flood risk management plan datasheet

Paisley west (target area 165)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1651	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
1652	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
1653	Reduce flood risk	Reduce the risk of flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 16501)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 16502)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

	Flood study (Ref: 16503)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	Renfrewshire Council to carry out a flood study to address risk from the Candren Burn and interactivity with surface water flooding.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 16504)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should investigate a potential extension to the White Cart flood warning scheme to include this area.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

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

02/11/19 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

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

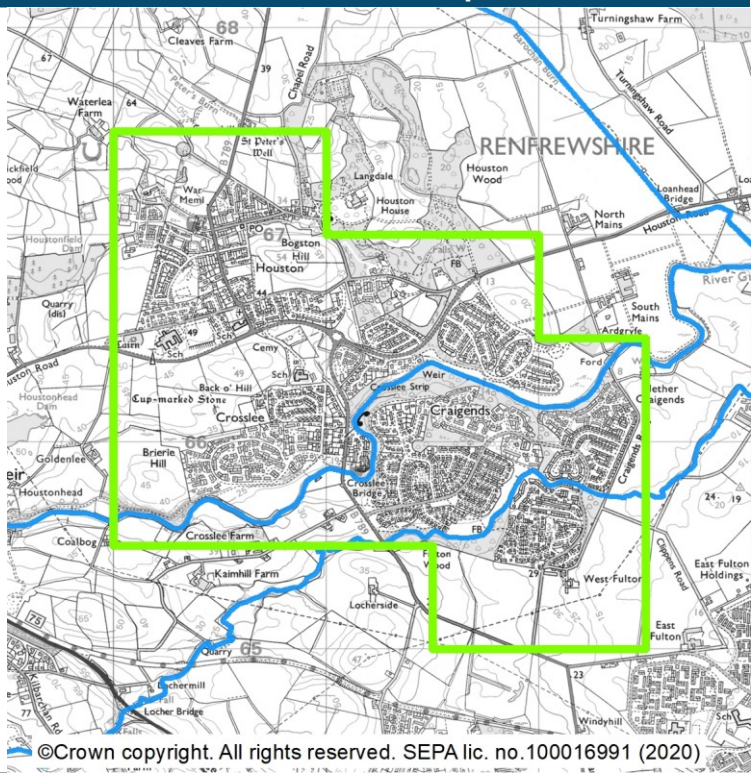
Flood risk management plan datasheet

Houston and Crosslee (target area 65)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this area. Houston & Crosslee 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

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

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Data collection (Ref: 6501)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 6502)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Adaptation plan (Ref: 6503)
Action	Information on climate change is to be used to develop an adaptation plan to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Crosslee Flood Protection Scheme 2001 adaptation plan.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Flood defence maintenance (Ref: 6504)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Maintenance to the Crosslee Flood Protection Scheme 2001 should continue and updates to the maintenance regime made based on the adaptation plan.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

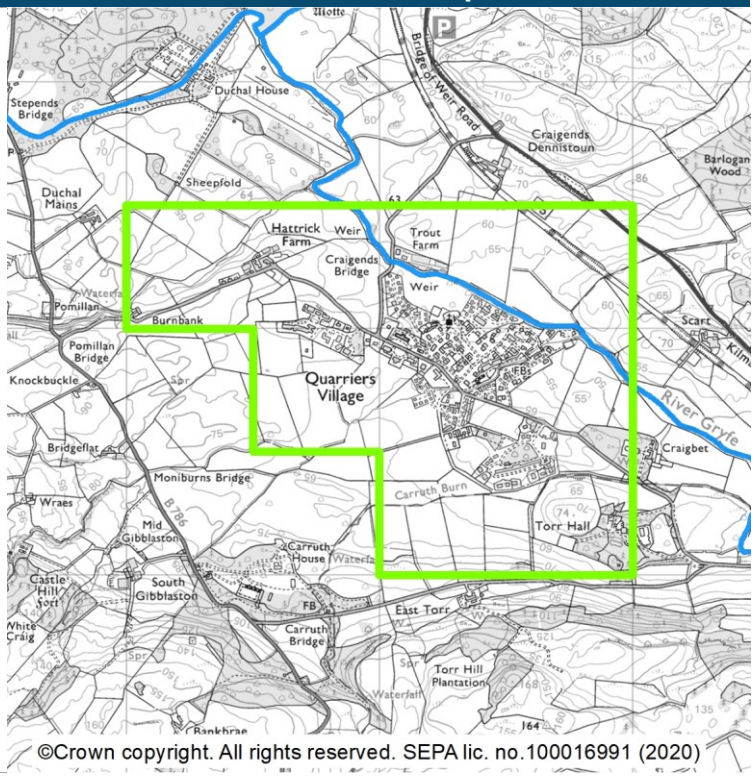
Flood risk management plan datasheet

Quarrier's Village (target area 99)

Summary

Quarrier s Village is a small village, which lies just west of Glasgow on the River Gryfe. It is 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
991	Avoid flood risk	Avoid inappropriate development that increases flood risk in Quarriers Village
992	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Quarriers Village
993	Reduce flood risk	Reduce the risk of flooding from the Gotter Water in Quarriers Village

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 9901)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The development of the Gotter Water Flood Protection Scheme should continue to the detailed design stage.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Community engagement (Ref: 9902)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 9903)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

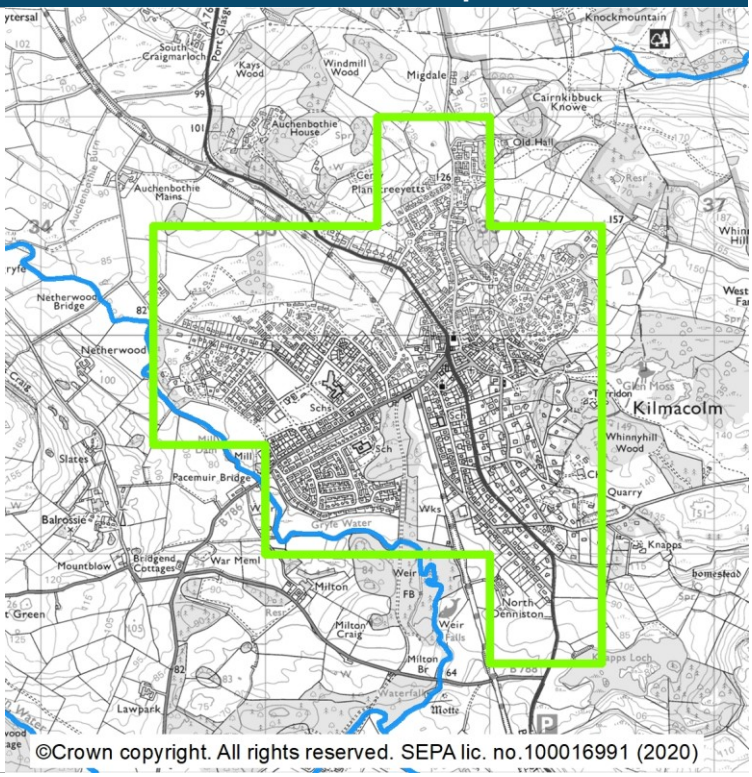
Flood risk management plan datasheet

Kilmacolm (target area 113)

Summary

Kilmacolm is a village located in Inverclyde, 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1131	Avoid flood risk	Avoid inappropriate development that increases flood risk in Kilmacolm
1132	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Kilmacolm
1133	Reduce flood risk	Reduce the risk of surface water flooding in Kilmacolm
1134	Reduce flood risk	Reduce the risk of flooding from the Glenmosston Burn in Kilmacolm

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (options appraisal) (Ref: 11301)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The 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.
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.

	Sewer flood risk assessment (Ref: 11302)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

Actions proposed after June 2028

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

	Flood scheme or works design (Ref: 11303)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.

	Community engagement (Ref: 11304)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

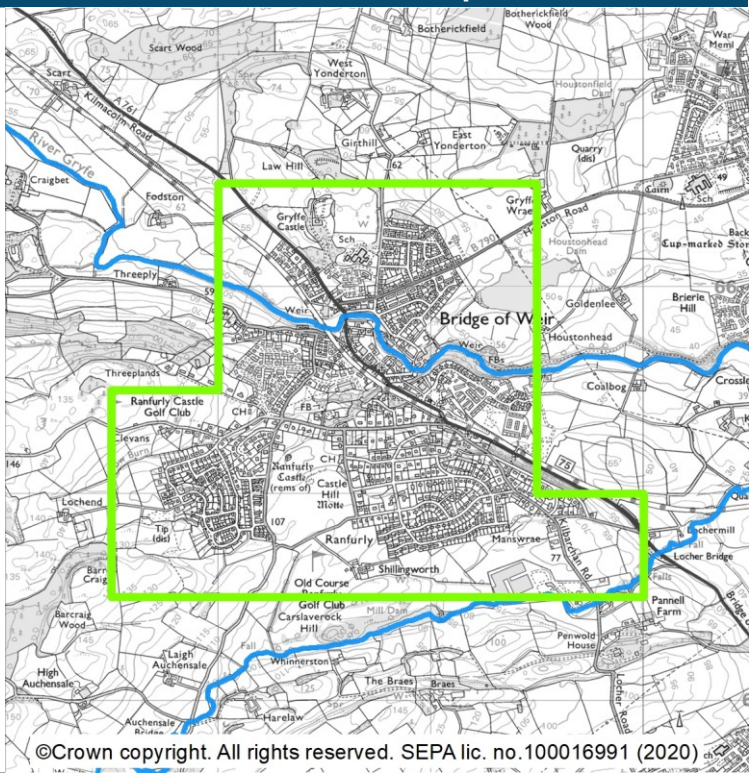
Flood risk management plan datasheet

Bridge of Weir (target area 65001)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this information has highlighted the risk of flooding in this 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
650011	Avoid flood risk	Avoid inappropriate development that increases flood risk in Bridge of Weir
650012	Improve data and understanding	Improve data and understanding of surface water flooding in Bridge of Weir

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Data collection (Ref: 6500101)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 6500102)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

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

What are the opportunities for joint working?

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

02/11/20 (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 areas in this PVA, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Bishopton	(target area 6)
Inchinnan	(target area 66)
Port Glasgow East	(target area 89)
Erskine	(target area 110)

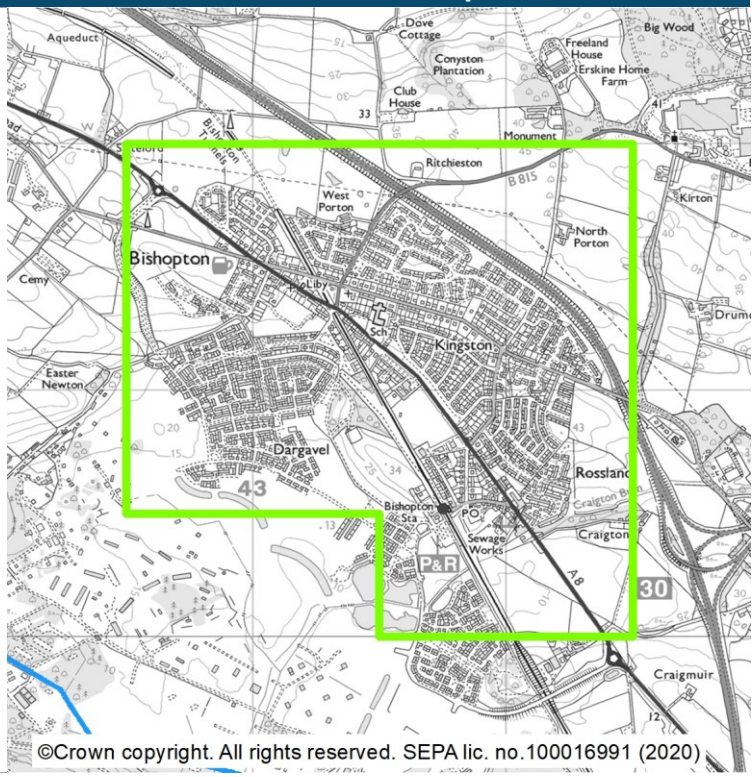
Flood risk management plan datasheet

Bishopton (target area 6)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
61	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
62	Improve data and understanding	Improve data and understanding of surface water and river flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Data collection (Ref: 601)
Action	Equipment that measures rainfall, river levels, erosion, ground levels or wave height may be installed and maintained to improve our understanding of flood risk. This can be done over short term or to measure longer term impacts.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 602)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 603)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

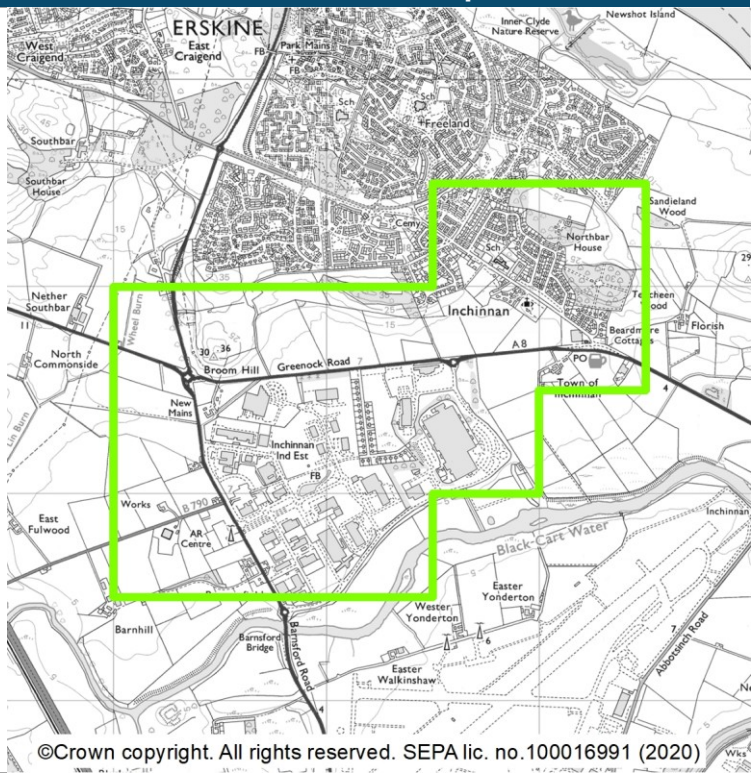
Flood risk management plan datasheet

Inchinnan (target area 66)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
661	Avoid flood risk	Avoid inappropriate development that increases flood risk in Inchinnan
662	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Inchinnan
663	Reduce flood risk	Reduce the risk of surface water flooding in Inchinnan

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 6601)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 6602)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

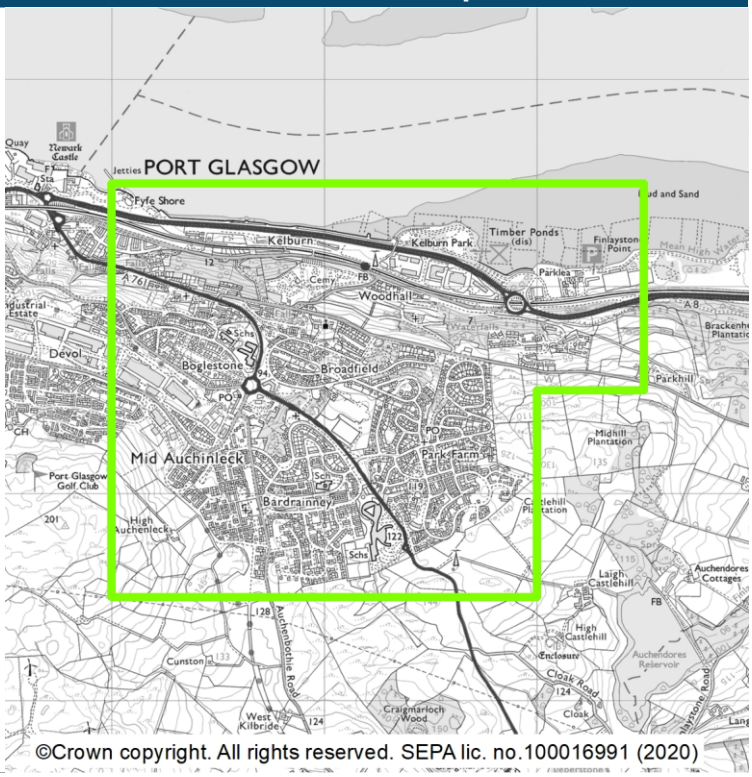
Flood risk management plan datasheet

Port Glasgow east (target area 89)

Summary

Port Glasgow east is located on the south bank of the River Clyde. It is within the Inverclyde local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The national level assessment 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
891	Avoid flood risk	Avoid inappropriate development that increases flood risk in Port Glasgow
892	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Port Glasgow
893	Reduce flood risk	Reduce the risk of surface water flooding in Port Glasgow

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (options appraisal) (Ref: 8901)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The 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.
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.

	Sewer flood risk assessment (Ref: 8902)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood warning maintenance (Ref: 8903)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Flood scheme or works design (Ref: 8904)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Flood scheme or works implementation (Ref: 8905)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Community engagement (Ref: 8906)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

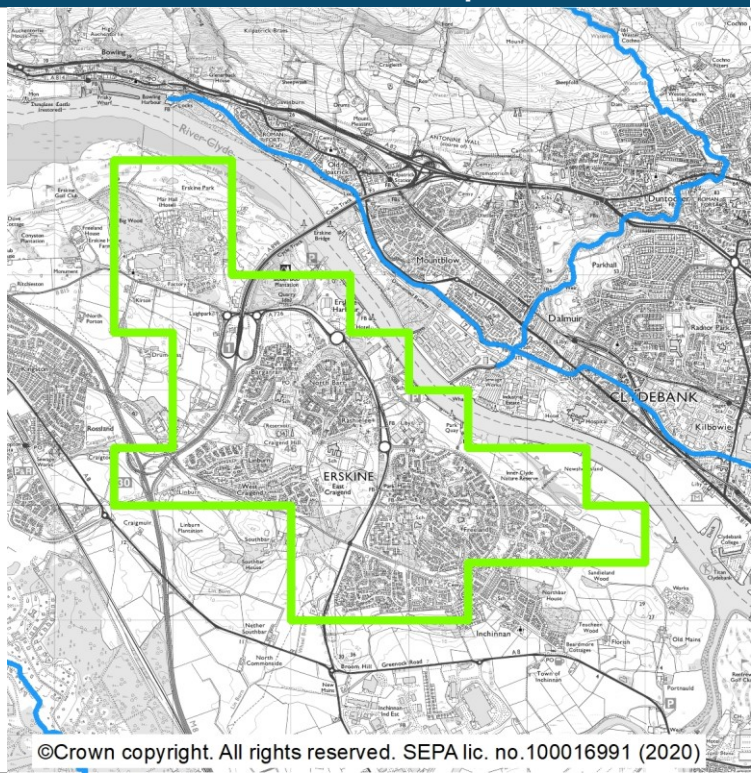
Flood risk management plan datasheet

Erskine (target area 110)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1101	Avoid flood risk	Avoid inappropriate development that increases flood risk in this target area
1102	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in this target area
1103	Reduce flood risk	Reduce the risk of surface water flooding in this target area

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 11001)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 11002)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system are to be identified. These priority areas will provide a baseline for the identification of next steps in managing water ponding or over-whelmed drainage systems. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Renfrewshire Council in coordination with Scottish Water.

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

What are the opportunities for joint working?

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

02/11/21 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Greenock	(target area 64)
Port Glasgow West	(target area 90)
Gourock	(target area 117)
Inverkip	(target area 146)

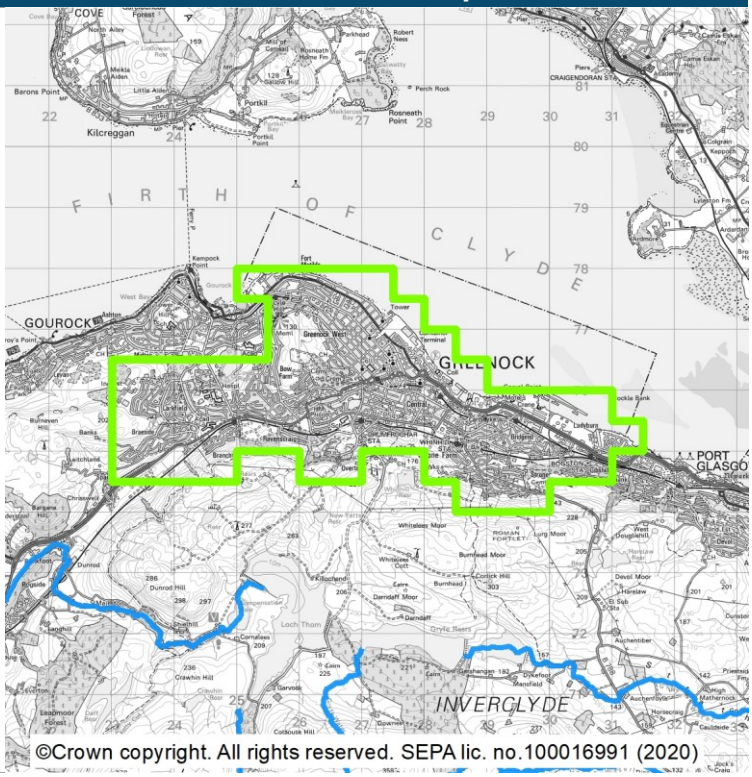
Flood risk management plan datasheet

Greenock (target area 64)

Summary

The town of Greenock is located on the south bank of the Firth of Clyde. This area is located within the Inverclyde local authority 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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
641	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of Greenock Reservoirs flood protection scheme
642	Avoid flood risk	Avoid inappropriate development that increases flood risk in Greenock
643	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Greenock
644	Reduce flood risk	Reduce the risk of flooding in Greenock

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (options appraisal) (Ref: 6401)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The 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.
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.

	Flood study (existing flood defences) (Ref: 6402)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Study of Greenock Reservoirs flood protection scheme to be developed following the outcomes of the surface water management plan.
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.

	Sewer flood risk assessment (Ref: 6403)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 6404)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 6405)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Flood scheme or works design (Ref: 6406)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further detail will be developed based on the outcome of preceding actions.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Flood scheme or works implementation (Ref: 6407)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	Further detail will be developed based on the outcome of preceding actions.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Community engagement (Ref: 6408)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	Further detail will be developed based on the outcome of preceding actions.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

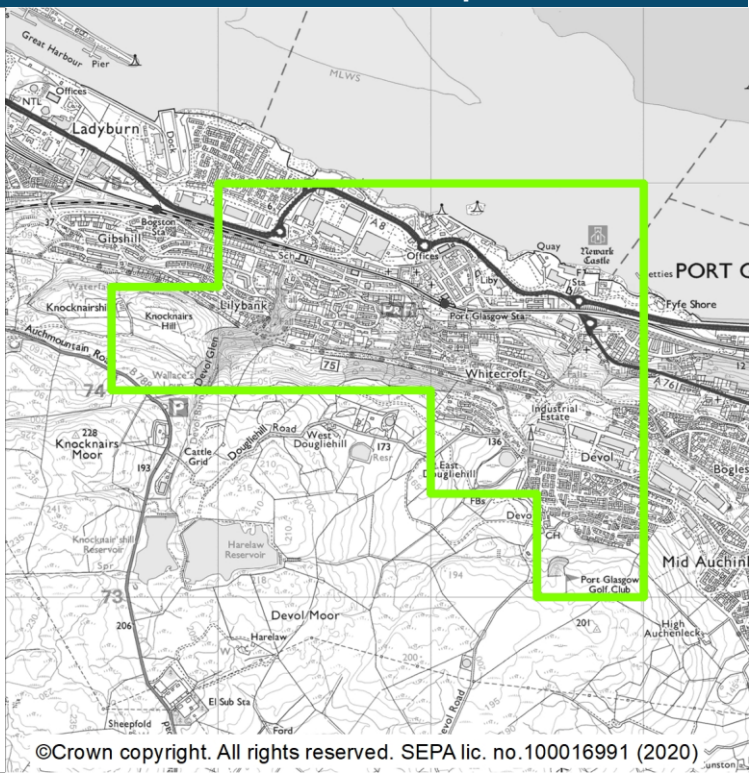
Flood risk management plan datasheet

Port Glasgow west (target area 90)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
901	Avoid flood risk	Avoid inappropriate development that increases flood risk in Port Glasgow
902	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Port Glasgow
903	Reduce flood risk	Reduce the risk of flooding in Port Glasgow

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 9001)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.

	Flood scheme or works implementation (Ref: 9002)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Community engagement (Ref: 9003)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Flood study (options appraisal) (Ref: 9004)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	The hotspot areas identified from the integrated catchment study should be considered with options developed to look at reducing the flood risk.
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.

	Sewer flood risk assessment (Ref: 9005)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood defence maintenance (Ref: 9006)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Maintenance of the coastal flood defences in the area.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 9007)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Flood study (existing flood defences) (Ref: 9008)
Action	The performance and condition of the existing flood defences are to be evaluated, including consideration of the likely impacts of climate change. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	To develop a long term understanding of the coastal flood protection in the area.
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.

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

What are the opportunities for joint working?

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

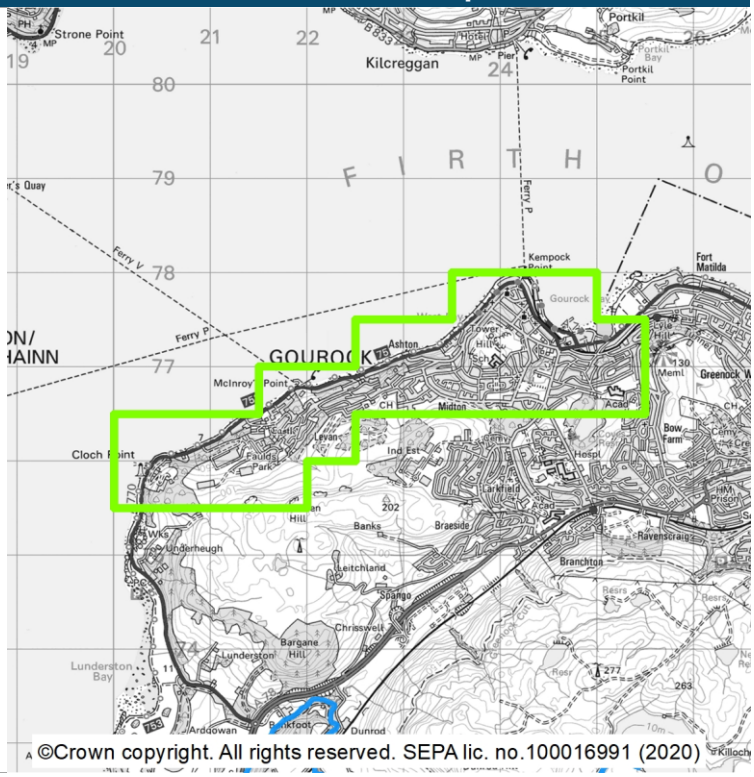
Flood risk management plan datasheet

Gourock (target area 117)

Summary

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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources. The 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1171	Avoid flood risk	Avoid inappropriate development that increases flood risk in Gourock
1172	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Gourock
1173	Reduce flood risk	Reduce the risk of flooding in Gourock

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 11701)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council in coordination with SEPA.

	Community engagement (Ref: 11702)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Flood study (Ref: 11703)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

	Flood study (options appraisal) (Ref: 11704)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	Action delivery lead is Inverclyde Council in coordination with Scottish Water.

	Sewer flood risk assessment (Ref: 11705)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Flood warning maintenance (Ref: 11706)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 11707)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

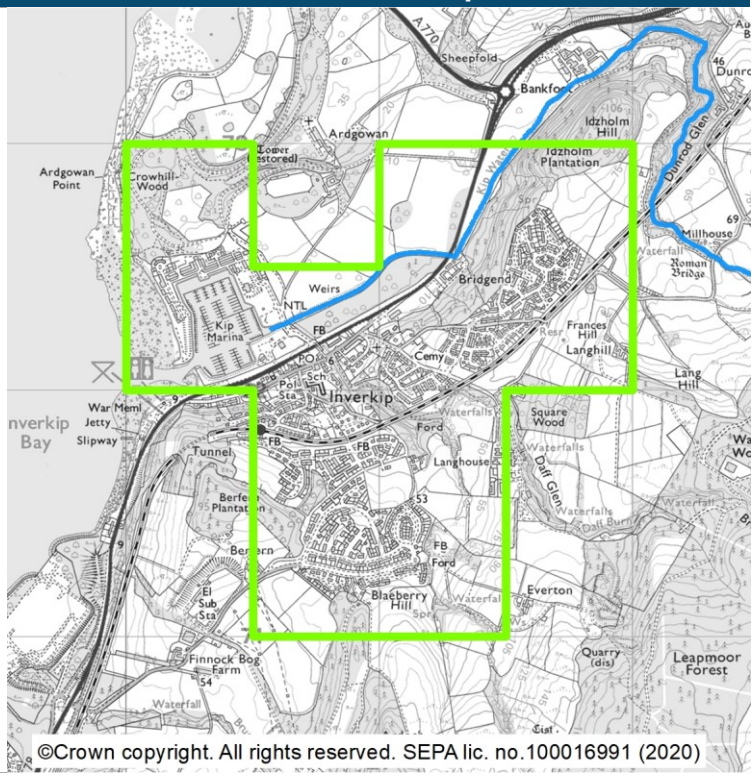
Flood risk management plan datasheet

Inverkip (target area 146)

Summary

Inverkip is a village located on the east shore of the Firth of Clyde. It is in the Inverclyde local authority 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, 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.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1461	Avoid flood risk	Avoid inappropriate development that increases flood risk in Inverkip
1462	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Inverkip
1463	Reduce flood risk	Reduce the risk of flooding in Inverkip

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Sewer flood risk assessment (Ref: 14601)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	Action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Strategic mapping improvements (Ref: 14602)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	Action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Flood study (options appraisal) (Ref: 14603)
Action	In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Further details of the action to be determined.
Coordination	Action delivery lead is Inverclyde Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

02/11/22 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Sandbank	(target area 100)
Dunoon	(target area 107)

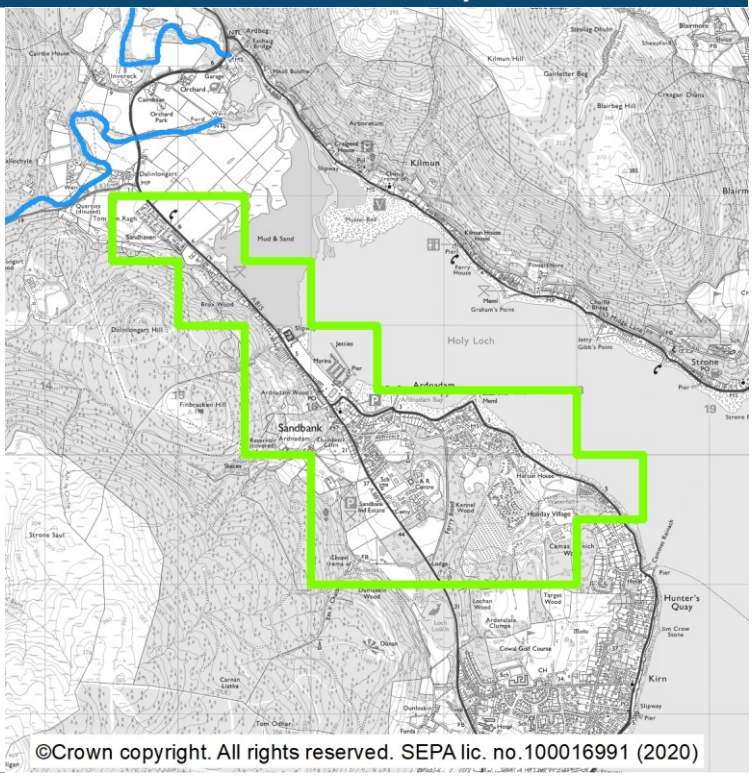
Flood risk management plan datasheet

Sandbank (target area 100)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1001	Avoid flood risk	Avoid inappropriate development that increases flood risk in Sandbank
1002	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Sandbank
1003	Reduce flood risk	Reduce the risk of surface water flooding in Sandbank

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 10001)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Flood scheme or works implementation (Ref: 10002)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Community engagement (Ref: 10003)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of the flood protection works.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Sewer flood risk assessment (Ref: 10004)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	The action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 10005)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	Implement the surface water management plan. The plan should be reviewed and updated regularly.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

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

What are the opportunities for joint working?

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

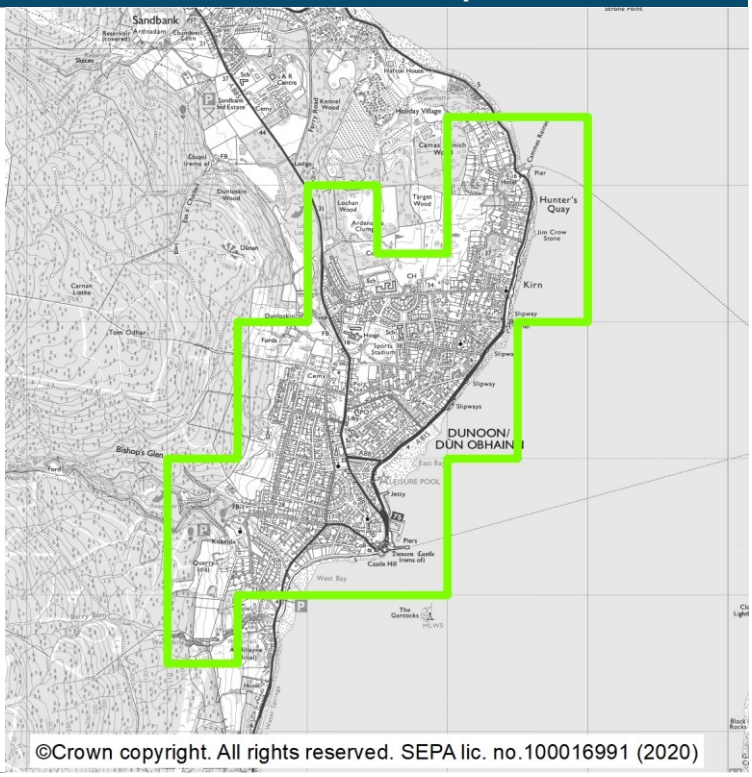
Flood risk management plan datasheet

Dunoon (target area 107)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1071	Avoid flood risk	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
1072	Avoid flood risk	Avoid inappropriate development that increases flood risk in Dunoon
1073	Improve data and understanding	Improve data and understanding of the performance of the flood protection asset in Dunoon
1074	Improve data and understanding	Improve data and understanding of the risk of flooding from the Milton Burn in Dunoon
1075	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Dunoon
1076	Reduce flood risk	Reduce the risk of surface water flooding in Dunoon

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood scheme or works design (Ref: 10701)
Action	The selected preferred approach for managing flood risk is to be designed following the completion of the flood study, including consideration of the long-term impacts of climate change. These can include small scale works or works to improve catchment management. This should guide adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Flood scheme or works implementation (Ref: 10702)
Action	The flood scheme/works is to be built following agreement of the design, costs and timescales.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Community engagement (Ref: 10703)
Action	Community engagement is to continue to be carried out in the area by the responsible authorities to raise awareness of flood risk.
Action detail	The responsible authorities to continue to engage with the community, with particular focus on the detailed design of the flood protection works.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Flood study (Ref: 10704)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Sewer flood risk assessment (Ref: 10705)
Action	The volume of water that would overwhelm the sewer system and cause flooding from man-holes or inside our homes is to be assessed, to support understanding of the performance of the urban drainage network
Action detail	Scottish Water will carry out an assessment of sewer flood risk within the highest priority sewer catchments, which includes 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.
Coordination	The action delivery lead is Scottish Water in coordination with the local authority and SEPA.

	Surface water management plan (Ref: 10706)
Action	Areas at risk of heavy or prolonged rainfall causing flooding due to water ponding on man-made surfaces or overwhelming the drainage system have been identified. Next steps in managing such water ponding or over-whelmed drainage systems have been identified and should be implemented. The plan is to be reviewed and updated as needed.
Action detail	Argyll and Bute Council to implement the surface water management plan. The plan should be reviewed and updated regularly.
Coordination	The action delivery lead is Argyll and Bute Council in coordination with Scottish Water and other actions in the area.

	Flood defence maintenance (Ref: 10707)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	Continue to maintain the Milton Burn Flood Protection Scheme (2012), Kilbride Road, Dunoon Flood Prevention Scheme (2007) and other existing flood defences in Dunoon.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 10708)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

02/11/23 (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 areas in this Potentially Vulnerable Area, which have been the focus of further assessment, these are listed below. Further information on the proposed objectives and actions to manage flood risk within this area is provided below.

List of target areas

Rothesay and Port Bannatyne	(target area 88)
Kilchattan Bay	(target area 116)

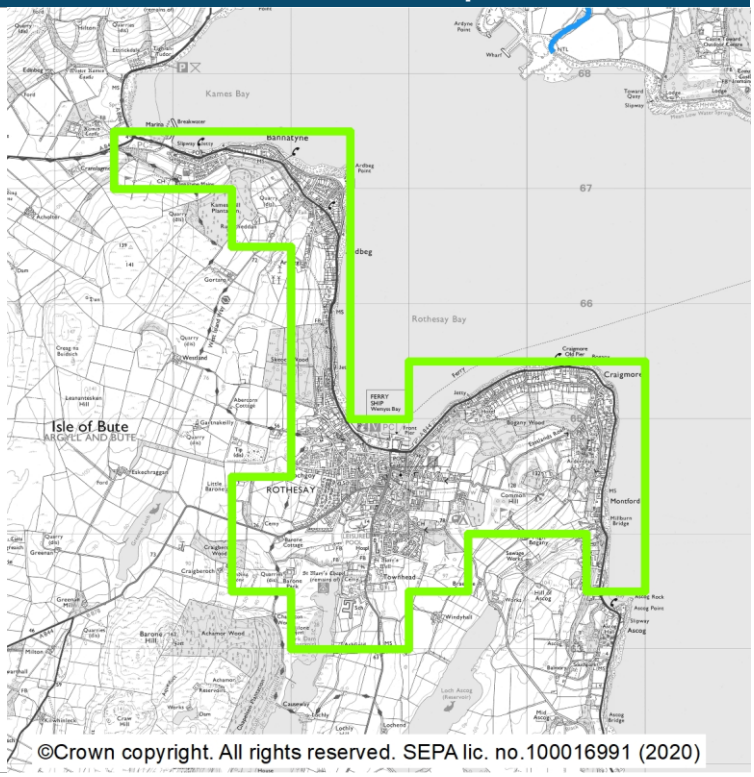
Flood risk management plan datasheet

Rothesay and Port Bannatyne (target area 88)

Summary

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.

Location map



What is the current understanding of flood risk?

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

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
881	Avoid flood risk	Avoid inappropriate development that increases flood risk in Rothesay and Port Bannatyne
882	Avoid flood risk	Avoid an increase in flood risk by the appropriate management and maintenance of the Rothesay Flood Prevention Scheme 2002
883	Improve data and understanding	Improve data and understanding of coastal and surface water flooding in Rothesay and Port Bannatyne including the Rothesay Flood Protection Scheme
884	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Rothesay and Port Bannatyne

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Flood study (Ref: 8801)
Action	An understanding of flood risk and associated issues in the area is to be developed, which may include surveys and modelling and should consider the impacts of climate change on flood risk. In areas where flood risk is confirmed, a range of possible options to manage flood risk are to be identified, including natural flood management actions where suitable, and a preferred approach is to be chosen. This should include adaptive planning to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	A flood study 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.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

	Strategic mapping improvements (Ref: 8802)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Flood warning maintenance (Ref: 8803)
Action	The Floodline flood warning service is to be kept operational through maintenance to the existing system and updates being undertaken as required.
Action detail	SEPA should maintain the Firth of Clyde coastal flood warning scheme.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

	Flood defence maintenance (Ref: 8804)
Action	The existing flood defences are to be maintained by the asset owner to ensure they are in good condition.
Action detail	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.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

There is potential to work with Bute Community Council Resilience Group.

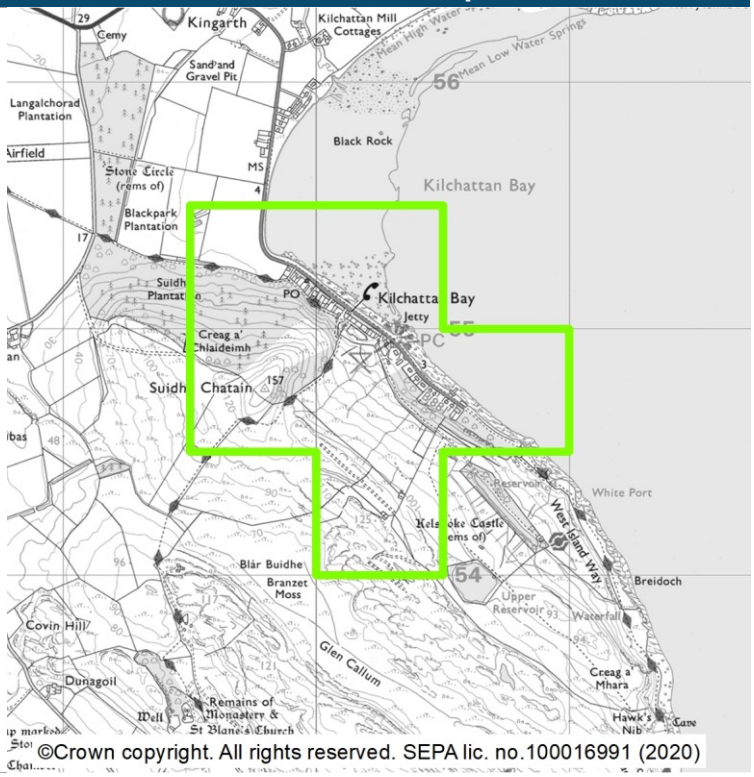
Flood risk management plan datasheet

Kilchattan Bay (target area 116)

Summary

Kilchattan Bay is located on the southern end of the Isle of Bute in the Argyll & 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.

Location map



What is the current understanding of flood risk?

This section provides a summary of information, which has helped to develop an understanding of flood risk in the area. Since 2011 SEPA has developed and updated national level assessments of flooding from rivers, surface water and coastal sources, and this national assessment has highlighted the risk of 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. Any actions taken should aim to support building natural resilience to flooding and not lead to an increase in erosion.

What are the objectives for the area?

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

• Take a long term, risk-based approach to flood risk management decisions and one that considers the impacts of and adaptability to climate change.

• Deliver coordinated and integrated flood risk management by engaging with communities and working in partnership, sharing data, expertise, services, and resources.

• Consider whole catchments and coastlines and work with natural processes and the environment to deliver multiple outcomes.

Objective ref	Objective type	Objective description
1161	Avoid flood risk	Avoid inappropriate development that increases flood risk in Kilchattan Bay
1162	Improve data and understanding	Improve data and understanding of coastal flooding and the impacts of climate change in Kilchattan Bay
1163	Prepare for flooding	Prepare for current flood risk and future flooding as a result of climate change in Kilchattan Bay

What actions are proposed for this area?

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

Actions proposed to start before June 2028

	Strategic mapping improvements (Ref: 11601)
Action	SEPA will continue to update flood maps based on new information.
Action detail	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.
Coordination	The action delivery lead is SEPA and coordination will be determined once the actions have been finalised.

Actions proposed after June 2028

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

	Shoreline Management Plan (Coastal Adaptive Plan) (Ref: 11602)
Action	An assessment of coastal flood and erosion risk is to be carried out. The plan should include assessment of climate change and develop adaptive approaches to allow for the impacts of climate change to be monitored, understood and managed.
Action detail	Progress the development of the shoreline management plan for the Argyll and Bute coastline.
Coordination	The action delivery lead is Argyll and Bute Council and coordination will be determined once the actions have been finalised.

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

What are the opportunities for joint working?

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

Flood Risk Management Glossary

July 2021

Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

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

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

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

Demountable defences	A temporary flood barrier is one that is only installed when the need arises, that is, when flooding is forecast. A demountable flood defence is a particular type of temporary defence that requires built-in parts and therefore can only be deployed in one specific location.

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

Flash flood	A flood that occurs a short period of time after high intensity rainfall or a sudden snow melt. A sudden increase in the level and velocity of the water body is often characteristic of these events, leaving a short time for warning or actions.

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

Flood Prevention Scheme / Flood Protection Scheme (FPS)	A flood protection scheme, as defined by the Flood Risk Management Act, is a scheme by a local authority for the management of flood risk within the authority area. This includes defence measures (flood prevention schemes) formerly promoted under the Flood Prevention (Scotland) Act 1961.

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

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

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

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

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

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

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

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

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

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

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

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

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