

The Flood Risk Management (Scotland) Act 2009



Duties of responsible authorities

The FRM Act places a duty on Scottish Ministers, SEPA and the responsible authorities to act to reduce 'overall flood risk'.

It also places a duty on them to:

1. Act in the way best calculated to manage flood risk in a sustainable way;
2. Promote sustainable flood management;
3. Act with a view to raising public awareness;
4. Act in the way best calculated to contribute to the achievement of sustainable development.



Aims of sustainable flood management

- The 5 main aims of SFM are:



A reduction in the number of people, homes and property at risk of flooding

Integrated drainage that decreases burdens on our sewer systems

Rural and urban landscapes with space to store water and slow down the progress of floods

Flood management actions being undertaken that will stand the test of time and be adaptable to future changes in the climate.

A well informed public

Developing a catchment approach

‘Actions that affect one part of a river or coastline can have consequences elsewhere. This means that flood management measures are most effective when they are coordinated across catchments and along coastlines in a way that is uninhibited by administrative boundaries’.

Scottish Government SFM Guidance

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SEPA and the responsible authorities now have to coordinate their actions to tackle flood risk across catchments.

General Duties - 1

As a “Responsible Authority”, Scottish local authorities have general duties as described in the Act that include:

1. A direct role in contributing to **reducing flood risk**;
2. A duty to consider the **social, environmental** and **economic** impacts of carrying out its functions;
3. A duty to act in the best way to contribute to the achievement of **sustainable** development.



General Duties - 2

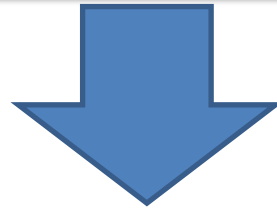
4. The council is required to work in **partnership** and **collaborate** with other responsible authorities, adopting an integrated **'joined up'** approach to managing flood risk;
5. It is required to promote sustainable flood risk management;
6. There is a duty to prepare **Local Flood Risk Management Plans.**



What is a Local Flood Risk Management Plan (LFRMP)?

National Flood Risk Assessment

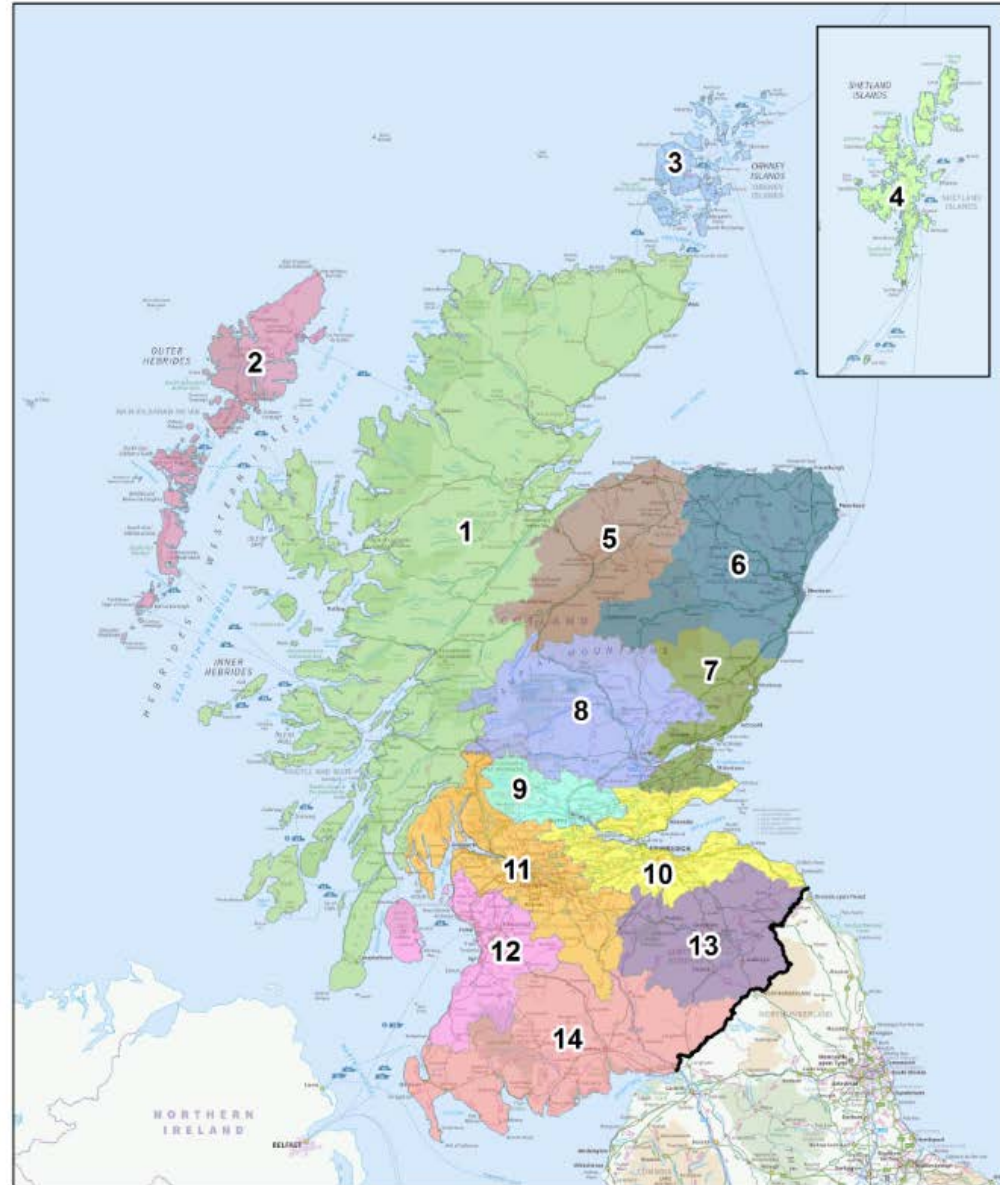
- Identifies area most vulnerable to flooding
- Identifies where flood management effort should be targeted



Local Flood Risk Management Plans (14 Districts)

- Deliver nationally based strategies which will be refined to meet local needs and priorities;
- Designed to identify and address flood risk within designated area;
- To be led and prepared by local authorities with support from local advisory groups;
- Will include a summary of how actions will be implemented.

Local Plan Districts



Local Plan Districts

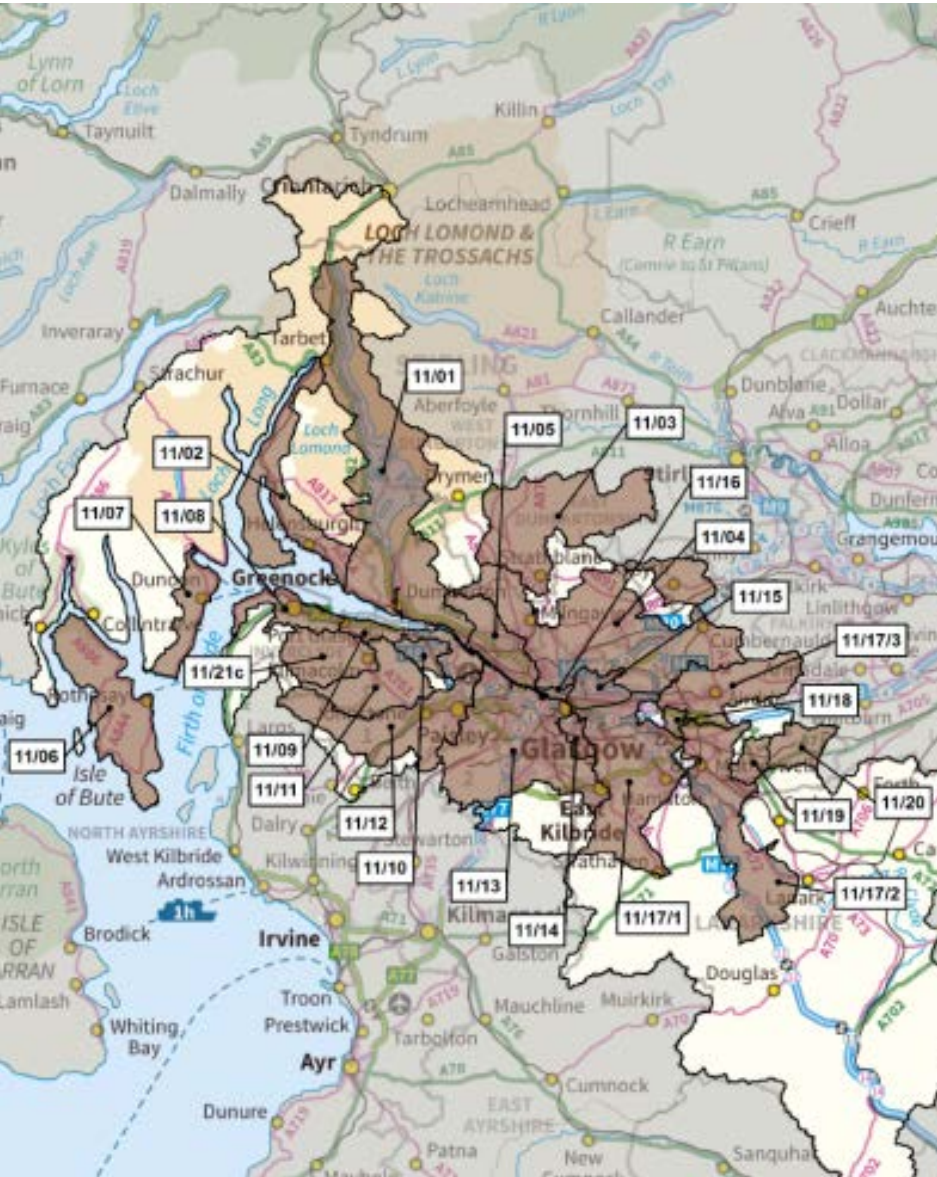
- | | |
|-----------------------------------|---------------------------|
| 1. Highland and Argyll | 8. Tay |
| 2. Outer Hebrides | 9. Forth |
| 3. Orkney | 10. Forth Estuary |
| 4. Shetland | 11. Clyde and Loch Lomond |
| 5. Findhorn, Nairn and Speyside | 12. Ayrshire |
| 6. North East | 13. Tweed |
| 7. Tay Estuary and Montrose Basin | 14. Solway |

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Local Plan Districts

- The FRM Act requires the production **of Flood Risk Management Plans** covering each Local Plan District.
- For each Local Plan District a **lead local authority** will be identified and a wider partnership formed.
- New **Flood Risk Management Strategies** formed
- Highlighting **Potentially Vulnerable Areas** (PVAs)

Flood Risk Management Strategy



Objectives to manage flooding in Potentially Vulnerable Area 11/02

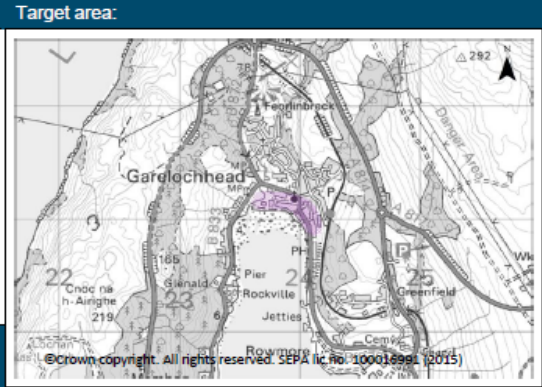
Objectives provide a common goal and shared ambition for managing floods. These objectives have been set by SEPA and agreed with flood risk management authorities following consultation. They were identified through an assessment of the underlying evidence of the causes and impacts of flooding. Target areas have been set to focus actions; they do not necessarily correspond to areas at risk in SEPA's flood map. The objectives below have been set for Helensburgh to Loch Long Potentially Vulnerable Area.

Reduce the risk of coastal flooding to residential properties and non-residential properties in Garelochhead

Indicators:

- 10 residential properties
- <10 non-residential properties
- £47,000 Annual Average Damages

Objective ID: 11002

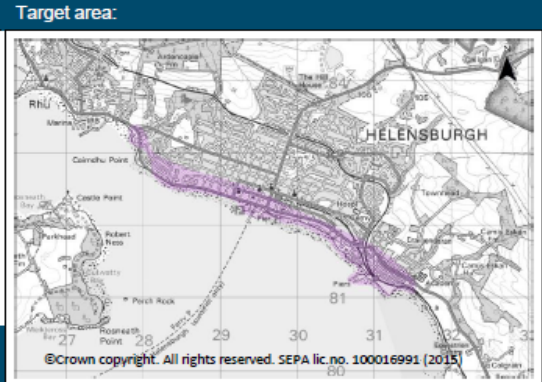


Reduce the risk of coastal flooding to residential properties and non-residential properties in Helensburgh

Indicators:

- 30 residential properties
- 10 non-residential properties
- £48,000 Annual Average Damages

Objective ID: 11003



Controlled Activities Regulations

Water Environment (Controlled Activities) (Scotland) Regulations

- Europe – *Water Framework Directive*
 - Scotland – *Water Environment and Water Services (Scotland) Act*
 - Regulations – *Water Environment (Controlled Activities) (Scotland) Regulations*
 - *General Binding Rules – 10 & 11*

Water Environment (Controlled Activities) (Scotland) Regulations

General Binding Rule 10

10. Discharge from a surface water drainage system to the water environment

- (a) All reasonable steps shall be taken to ensure that the discharge shall not result in pollution to the water environment
- (d) the discharge shall not contain any water run-off from any built developments, the construction of which is completed after 1st April 2007, or from construction sites operated after 1st April 2007, unless—
- (ii) following construction those developments or construction sites are drained by a SUD system equipped to avoid pollution of the water environment;

SUDS are the law!

Nature Conservation (Scotland) Act

Part 1 - Biodiversity

Section 1 - Duty to further the conservation of biodiversity

- (1) It is the duty of every public body and office-holder, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions.
- (2) In complying with the duty imposed by subsection (1) a **body or office-holder** must have regard to;
 - (a) any strategy designated under section 2(1)*, and
 - (b) the United Nations Environmental Programme Convention on Biological Diversity of 5 June 1992 as amended from time to time (or any United Nations Convention replacing that Convention).

* Scottish biodiversity strategy

Technical Handbook

(Building Standards)

3 – Environment

3.6 - Surface Water Drainage

Mandatory Standard 3.6

Every building, and hard surface within the curtilage of a building, must be designed and constructed with a surface water drainage system that will:

- a. ensure the disposal of surface water without threatening the building and the health and safety of the people in or around the building, and
- b. have facilities for **the separation and removal of silt, grit and pollutants.**

Technical Handbook

(Building Standards)

3.6.4 Sustainable Urban Drainage Systems

Sustainable urban drainage (SUD) is a concept that focuses decisions about drainage on the environment and people. The concept takes account of the quantity and quality of surface water run-off and the amenity value of surface water in the urban environment.

The variety of design options available allows designers and planners to consider local land use, land take, future management and the needs of local people. SUD systems often stretch beyond the confines of the curtilage of individual buildings but need to be considered as a whole.

Fundamental to a successful SUD system is a management train that allows for a range of components to be incorporated for control or management of surface water, such as:

- **Source Control** – control of run-off at or very near its source by components including soakaways, other infiltration methods, green roofs or permeable surfaces.
- **Site Control** – management of surface water within a building site by components including large soakaways, infiltration systems or detention basins.
- **Regional Control** – management of surface water from building sites by components including balancing ponds or wetlands.

SUD systems range from the use of basic components such as permeable materials that allow surface water to infiltrate to ground in a way that can mimic natural drainage to more complex engineered components including filter strips, swales, or wet ponds that will convey or store surface water. The CIRIA document C697 'The SUDS Manual' 2007 provides comprehensive advice on initial drainage design assessments and best practice guidance on the planning, design, construction, operation and maintenance of SUD systems.

Careful consideration should be given to the design of surface water drainage from brownfield land, particularly where contamination might be expected. SEPA provides guidance in their SUDS Advice Note – 'Brownfield Sites'

<http://www.sepa.org.uk> .

Generally SUD systems are designed to utilise natural processes and regular monitoring and maintenance will be needed to ensure the system as conceived is operating as intended.

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New fully revised
manual released
Nov 2015

C753 “The SuDS Manual” 2015 [http://www.ciria.org/Memberships/The SuDs Manual C753 Chapters.aspx](http://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx)

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Scottish Planning Policy

S.263

Surface Water Flooding

- Infrastructure and buildings should generally be designed to be free from surface water flooding in rainfall events where the annual probability of occurrence is greater than 0.5% (1:200 years).
- Surface water drainage measures should have a neutral or better effect on the risk of flooding both on and off the site, taking account of rain falling on the site and run-off from adjacent areas.

S.268

Proposed arrangements for SuDS should be adequate for the development and appropriate long-term maintenance arrangements should be put in place.

Questions?

