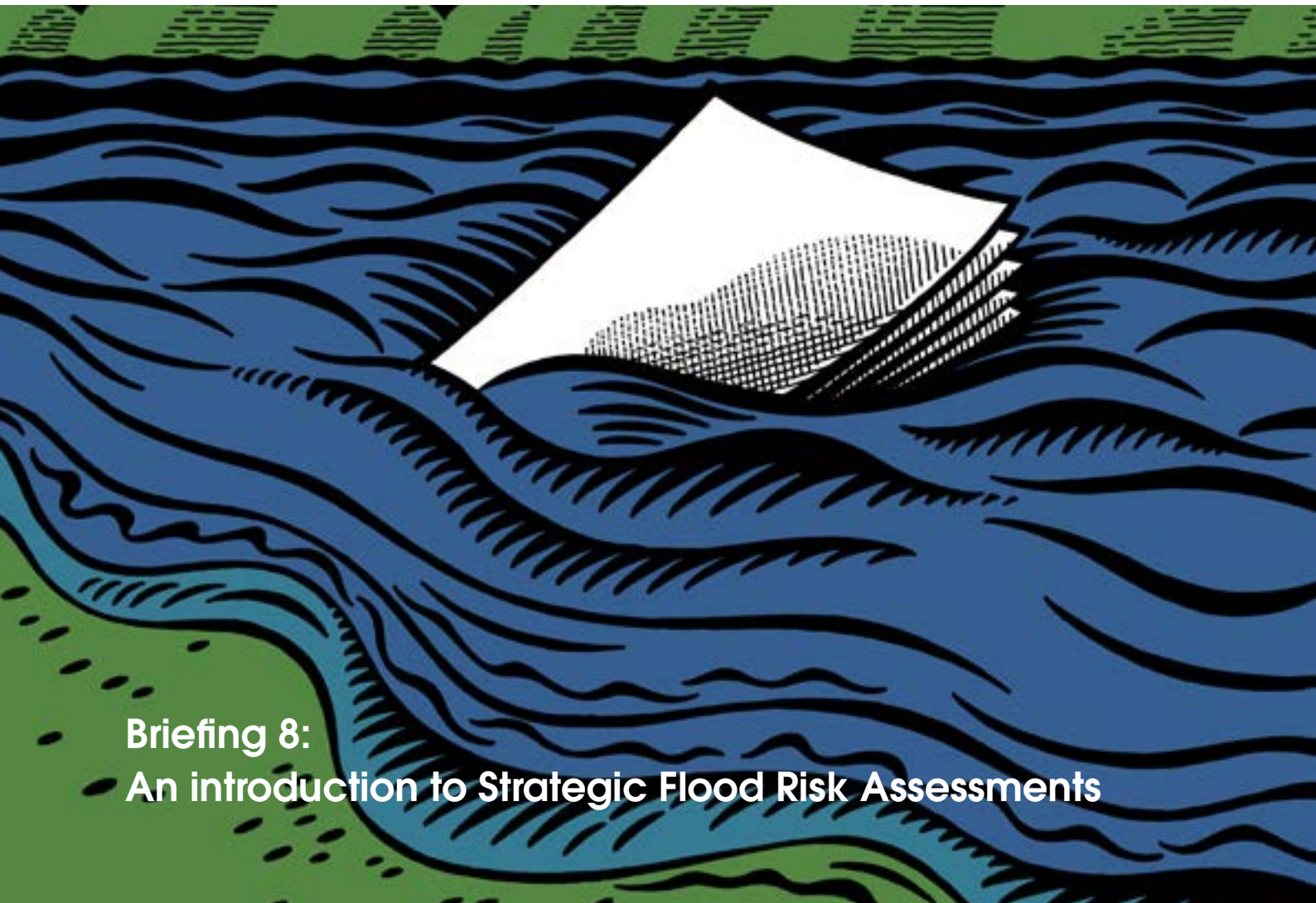


building a safer future

a guide for communities on navigating the planning system in england to tackle flood risk



Briefing 8:
An introduction to Strategic Flood Risk Assessments



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Briefing 8

An introduction to Strategic Flood Risk Assessments

Introduction

This briefing is designed to give some more detail on one of the most important documents for dealing with **flood risk** in your community. It should be the place where expertise from professionals and communities comes together to guide how we will deal with the growing risks of flooding. It is a key piece of evidence for the **local plan** and knowing about how it works will make your voice much more effective in influencing decisions.

What is a Strategic Flood Risk Assessment?

A Strategic Flood Risk Assessment (SFRA) is a report produced by **local planning authorities** to inform its decisions on new development with an up-to-date understanding of all sources of current and future flood risk in the authority area. The SFRA can be produced for a larger area if local authorities choose to work together.

SFRAs need to be kept up to date because they are used to make important decisions about **development**. Most local planning authorities will update their SFRA when they start working on a new local plan, so that the plan is based on up-to-date information. However, they might also be updated if information about flood risk changes (for example to account for updates to **national climate change allowances**, the impact of a flooding event or new **flood defences**).

What information does it contain?

The **Environment Agency** has produced guidance for local authorities¹ on what should be in SFRAs. This guidance is clear that the SFRA must contain information on:

- the risks from different sources of flooding (including **coastal flooding**, rivers, **surface water** and **groundwater**);
- how **climate change** is likely to affect flood risk in future, using the Environment Agency's **climate change allowances**;
- how changes to an area (for example from new development) will impact flood risk; and
- how flood risk can be reduced.

One important aspect of the SFRA is that all sources of flood risk need to be considered. There has historically been stronger understanding of how to assess flood risks from **main rivers** and the sea, but SFRAs also need to demonstrate that flood risk from sources such as surface water, groundwater, **sewers**, reservoirs and canals is accounted for. More detailed good practice guidance which aims to help local authorities understand all aspects of flood risk has been produced by the Environment Agency and the Association of Directors of Environment, Economy, Planning & Transport (ADEPT).²

1 *How to prepare a strategic flood risk assessment*. Environment Agency, March 2022. <https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment>

2 *Strategic Flood Risk Assessments A Good Practice Guide*. Environment Agency, ADEPT and CIWEM, December 2021. <https://www.adeptnet.org.uk/documents/strategic-flood-risk-assessment-good-practice-guide>

A glossary of the technical terms used in this guide is appended to this Briefing. The first use of a glossary term in each briefing appears in **bold green** text. Clicking on this text will take you to the corresponding entry in the glossary. Clickable links to external sources of information are set in **bold blue**.

How is it used?

Information in the assessment will help local authorities to:

- understand the locations that are at risk from flooding;
- steer development to areas with the lowest risk of flooding;
- identify the impacts of climate change and how an area can adapt to these;
- plan for future flood defences, including those that might be required to make an area safe in the long term;
- consider whether proposals for new development will be safe from flooding; and
- understand what needs to happen to make development safe.

A really important role of the local planning authority is to produce a local plan. The local plan identifies locations for development over the long term, and includes policies that development must comply with. National planning policy requires local authorities to apply the ‘**sequential**’ and (where appropriate) the ‘**exception**’ tests to make sure locations for development are safe from flooding. National planning policy requires local authorities to apply the ‘sequential’ and (where appropriate) the ‘exception’ tests, to steer development away from flood risk areas and, where this is not possible, ensure development can be made safe without increasing flood risk elsewhere. This test is not easy to understand, even for professionals, and more help in working out what they mean can be found in our **Briefing 3** on national law and policy.

The SFRA will contain the information required for local authorities to carry out these tests and consider which locations are appropriate for future development, and the type of development that is appropriate in different places.

The SFRA is not just used to inform the local plan. It will inform application of the sequential test for individual planning applications. It will also inform other important evidence documents – for example the **Strategic Environmental Assessment** – which considers proposals within a plan against a range of environmental and sustainability considerations.

The SFRA should also be used by other local authority teams to inform strategies and plans on issues including water and land management, emergency planning, climate change adaptation, green infrastructure and transport and infrastructure.

A range of other organisations will also use the SFRA to help them understand flood risk. For example, it should be used by **developers** to inform **site specific flood assessments**, helping them understand the risks from flooding and what measures need to be put in place to address them. It may also be used by **risk management authorities** to understand where and what type of features and structures might be needed in an area to help manage flood risk. The Environment Agency will look at information in the SFRA so they can give advice to authorities on their local plans. It is also used by organisations involved in emergency planning, such as the Environment Agency, local authorities and emergency services, so they can understand which areas might be more likely to experience flooding events and plan their responses accordingly.

Local communities involved in neighbourhood planning (see **Briefing note 9**) will also use information in the SFRA to inform their plan.

Information on flood risk will be presented on maps (either within the SFRA or online). This means different organisations and local communities can see flood risk information at a localised level. This can be very helpful to understand whether communities are vulnerable to flooding and brings information from a range of sources together in to one place.

Level 1 and Level 2 SFRAs

It is worth being aware that there are two levels of SFRAs. Every local planning authority needs to produce a ‘Level 1’ SFRA, and this will determine whether development in the area can be accommodated without having to building in flood risk areas. Where it’s not possible to wholly avoid flood risk areas, a ‘Level 2’ SFRA will be required. This is because a more detailed understanding of different sites will be needed, so that those areas with the least risk of flooding can be identified and measures to address flood risk can be explored.

Solutions and recommendations

The SFRA is not just about identifying risks and issues but should also contain recommendations for how flood risk can best be addressed based on local information.

An SFRA might, for example, identify where new flood defences are needed or make recommendations for new developments to

reduce flood risk. Opportunities for improving **natural flood management** through different use of land, the restoration of waterways or improving **green infrastructure** might also be included in the SFRA. Some recommendations might focus on how to make development in flood risk areas safe or when flood risk emergency plans should be used.³

Some areas of land might be identified as potentially useful for helping to manage flood risk in the future. This might be because flood defences will be needed in future, or because it's likely that more land will be needed to store water in the event of rivers flooding. This land should be identified in the SFRA so local authorities are able to safeguard this and make sure it is available for future flood management.

In some cases, the SFRA may lead to the conclusion that some areas with existing development are extremely vulnerable to flooding and may not be viable in the long term. These should be identified so that local authorities are able to better manage development in highly vulnerable locations and are encouraged to consider where the relocation of existing development may be required in future.

Can communities get involved in SFRAs?

Local planning authorities have to consult with some organisations including the Environment Agency, the **Lead Local Flood Authority** and other departments within the council from the early stages of preparing an SFRA, but there is no requirement to consult with communities when they develop their SFRA. There should also be an opportunity to provide comments to the local planning authority on the SFRA when it undertakes public consultation on its local plan, as the SFRA is likely to be part of the local plan evidence base.

As the SFRA progresses, local planning authorities will consult with a range of organisations to access useful information, identify opportunities to reduce flood risk and to seek comments on the document at a draft stage. The list of consultees suggested by the Environment Agency (see box 1) includes local **flood action groups**, where relevant. Members of flood action groups should therefore have an opportunity to provide information on localised flood risk issues and share ideas for solutions that

Box 1: List of organisations local authorities are recommended to consult with in the preparation of the SFRA.

- emergency planners
- emergency services
- water and sewerage companies
- reservoir owners or undertakers, if relevant
- internal drainage boards, if relevant
- coastal groups, if relevant
- the coast protection authority, if relevant
- the Canal and River Trust, if relevant
- catchment partnerships, if relevant
- highways authorities
- district councils
- regional flood and coastal committees
- local flood action groups, if relevant

Source: Environment Agency
<https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment>

could be included in the SFRA.

However, if you are not a member of a flood action group, that does not mean you cannot share information with your local planning authority if you think it might help them understand localised flood risk issues. As explained in **Briefing 4**, local knowledge can be valuable for authorities to understand risks arising from surface water flooding, **culverts** and smaller watercourses that might not be included on datasets.

This briefing note draws from government and Environment Agency guidance which is available online. For a more in depth understanding of SFRAs see the following information:

How to prepare a strategic flood risk assessment. Environment Agency, March 2022.

<https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment>

Strategic Flood Risk Assessments A Good Practice Guide. Environment Agency, ADEPT and CIWEM, December 2021

<https://www.adeptnet.org.uk/documents/strategic-flood-risk-assessment-good-practice-guide>

³ *How to prepare a strategic flood risk assessment.* Environment Agency, March 2022. <https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment>

Glossary

Climate change

The long-term change in weather due to human activity. Global temperatures are continuing to increase, and extreme weather events are becoming more common.

Climate change allowances

Predictions of anticipated change in peak river flow, peak rainfall intensity and sea level rise caused by future climate change. Local Planning Authorities must consider local climate change allowances when preparing Strategic Flood Risk Assessments. Climate change allowances are also known as flood risk allowances. They are kept up to date by the Environment Agency and published here:

<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

Coastal erosion

The loss of land along the coast due to the action of waves, tides, currents, and wind-driven sea water over time. Over a long period it is possible that homes and even whole villages will fall into the sea as the land retreats.

Coastal flooding

Seawater flooding of an area of land on the coast, often caused by a severe storm which forces excessive quantities of sea water onto the land.

County Council

A form of elected local government for a county area, responsible for functions such as education, but also minerals and waste planning.

Culvert

A man-made structure that allows water to flow underneath a road, footpath, or railway line. Culverts can become blocked by debris, which may cause flooding.

Developer/property developer

A company that purchases land to be used for new development, such as housing and, usually, undertakes the building of (for example) houses and the development of other infrastructure.

Development

Building on or carrying out other industrial activities on an area of land. In the planning system, it most often refers to the building of new homes.

District Council

A form of elected local government for a rural or urban district, with local planning among its responsibilities (some district-level councils are formally named borough councils or city councils).

Environment Agency

Public body with oversight of the management of all sources of flooding and coastal erosion – although it is directly responsible only for managing the risk of flooding from main rivers, reservoirs, estuaries, and the sea. It advises on Strategic Flood Risk Assessments and site-specific flood risk assessments, and on the appropriateness of a proposed development.

Exception Test

A test undertaken as part of the process of granting planning permission in an area at risk of flooding. If the Sequential Test shows that it is not possible to develop in a lower-risk area, the Exception Test is used to assess whether the wider benefits of building in a location with higher risk outweigh the disbenefits from the flood risk.

Flood Action Group (FLAG)

A group formed by people living within a community threatened by the risk of flooding. Flood Action Groups act as a representative voice for their wider community when working with their Local Planning Authority and in influencing the planning system on matters concerning local flood risk.

Flood defences

Structures designed to prevent flooding or control flood water in order to minimise the harm to people and property.

Floodplain

A flat, low-lying area next to a body or bodies of water prone to flooding.

Flood risk

The combination of the likelihood of a flood event occurring and the impact that the flood would have if it did occur.

Fluvial flooding

Flooding caused when the water level in a river, ditch or stream overflows.

Green infrastructure

A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.

Groundwater flooding

Flooding caused by a rise in the level of underground water (known as the water table) to above ground level, as a result of prolonged or heavy rainfall. Groundwater flooding tends to happen gradually and can last much longer than other types of flooding as the water cannot drain into the saturated ground.

Lead Local Flood Authority (LLFA)

An area's Lead Local Flood Authority is either the County Council or the Unitary Authority. Lead Local Flood Authorities are required to provide advice on all planning applications for major development involving surface water drainage. They provide advice on how developments manage surface water drainage and use sustainable drainage systems. LLFAs may also choose to provide advice on flood risk from local sources of flooding, such as surface water and groundwater.

Local Plan

The plan for future development in your local area, prepared by the Local Planning Authority. It includes maps of where new housing, other development and infrastructure are to go, and also contains policies prescribing the sort of things that can and cannot be built and rules on the quality of anything that is built. A planning application will be accepted much more easily if it is in line with the Local Plan. But planning permission can be given to proposals in areas not allocated in the plan if a substantial case is made. Further information is available [here](#).

Local Planning Authority (LPA)

The council (or National Park Authority in some cases) that carries out planning functions for your local area. In areas where there is both a County Council and a District Council, it is the District Council that prepares the Local Plan.

Main river

Main rivers are the main watercourses shown on the statutory main river maps drawn up by the Environment Agency and the Department for Environment, Food and Rural Affairs.

National Planning Policy Framework (NPPF)

Document setting out the government's planning policies in England, and outlining how they should be applied. The NPPF must be taken into account by the Local Planning Authority when drawing up a Local Plan and in making decisions on planning applications. The NPPF is available [here](#).

Natural flood management

The use of natural processes to minimise the impact of flood events. Examples include restoring bends in rivers to allow more water to be carried, and changing the way that land is managed so that the soil can absorb more water.

Neighbourhood Forum

A body formed either by a Town Council or a Parish Council (where one exists) or by local people for the purpose of producing a Neighbourhood Plan.

Neighbourhood Plan

A document produced by the local community, as represented by a Neighbourhood Forum, which sets out planning policies for a local area and is used by the Local Planning Authority when deciding whether to approve or deny a planning application.

Planning application

A document (physical or electronic) completed by a person, a group of people or an organisation to request permission from the Local Planning Authority to build something new or make a change to an existing building or structure.

Policy

A set of ideas or a plan of what to do in particular situations that have/has been officially established by national or local government.

Regional Flood and Coastal Committee

There are 12 Regional Flood and Coastal Committees in England. They work with the Environment Agency and other partners to understand local issues better.

Risk Management Authorities (RMAs)

Public bodies, including the Environment Agency and Lead Local Flood Authorities, who work with communities to manage the risk of flooding from rivers, the sea, surface water, groundwater, and reservoirs.

Sequential Test

A planning test comparing a proposed development site with other available sites to determine which has the lowest flood risk and to explore whether development could be steered to lower-risk areas.

Sewer flooding

Flooding occurring when sewage or water leaks from a sewerage system or rises above ground level through drainage systems, toilets, sinks, or showers.

Site-specific flood risk assessment

An assessment of flood risk on and resulting from a development site, carried out either by or on behalf of a developer as part of a planning application. The Local Planning Authority receiving the planning application uses the assessment to help determine whether to grant or deny planning permission.

Strategic Environmental Assessment (SEA)

The process of collecting information about the environmental impact of the policies included in a draft Local Plan. It is undertaken at the plan-making stage.

Strategic Flood Risk Assessment (SFRA)

The process of collecting information about the risk to an area from flooding from all sources, now and in the future, taking account of the impacts of climate change. It assesses the impact that land use changes and development in the area will have on flood risk. Environment Agency guidance on producing a Strategic Flood Risk Assessment is available [here](#).

Surface water flooding

Surface water flooding occurs when water that has fallen onto the ground flows over impermeable surfaces, or accumulates in low spots, and the capacity of drainage systems is exceeded. It is very difficult to predict, as it is usually caused by very localised, intense storms which overwhelm surface water sewers and drainage systems. These flash floods typically occur and then disappear in a short space of time, but they can still be devastating if they get into our homes. The risk of surface water flooding can be exacerbated by sealing previously permeable surfaces (paving over gardens and other green spaces, for example), with the result that water can no longer soak away into the ground.



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