

F Flood risk policy and strategic documents

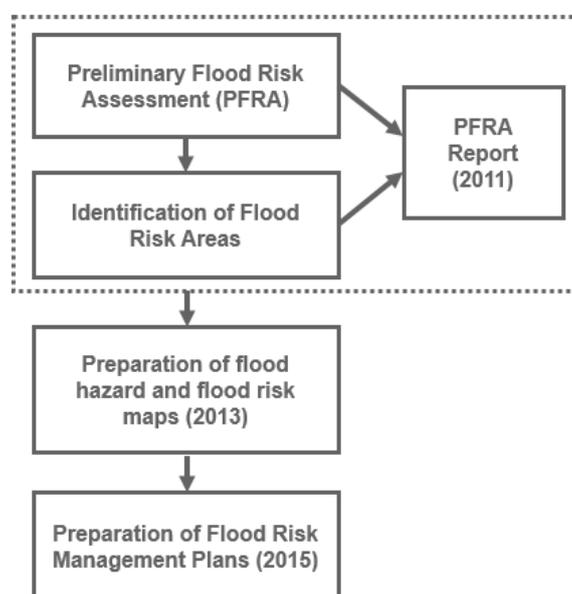
F.1 Flood Risk Regulations (2009) and Flood and Water Management Act (2010)

F.1.1 Flood Risk Regulations, 2009

The Flood Risk Regulations (2009) translate the current EU Floods Directive into UK law and place responsibility upon all Lead Local Flood Authorities (LLFAs) to manage localised flood risk. Under the Regulations, the responsibility for flooding from rivers, the sea and reservoirs lies with the Environment Agency; however, responsibility for local and all other sources of flooding rests with LLFAs. South Gloucestershire Council is the LLFA covering the Oldbury on Severn area.

Figure F-1 illustrates the steps taken to implement the requirements of the EU Directive in the UK via the Flood Risk Regulations.

Figure F-1: Flood Risk Regulation Requirements



The next cycle of the Flood Risk Regulations has now begun (2015 – 2021).

F.1.2 Preliminary Flood Risk Assessments (PFRAs)

In accordance with the Regulations, LLFAs had the task of preparing a Preliminary Flood Risk Assessment (PFRA) report.

PFRAs report on significant past and future flooding from all sources except from Main Rivers and reservoirs, which are covered by the Environment Agency, and sub-standard performance of the adopted sewer network (covered under the remit of Severn Trent Water). PFRAs are a high-level screening exercise and consider floods which have significant harmful consequences for human health, economic activity, the environment and cultural heritage. The South Gloucestershire [PFRA](#) document covers the Oldbury on Severn area.

The Regulations require the LLFAs to identify significant Flood Risk Areas. The threshold for designating significant Flood Risk Areas is defined by Defra and the PFRA is the process by which these locations can be identified.

The PFRA will be reviewed as part of the new cycle of the Flood Risk Regulations. The new / reviewed PFRAs will be prepared for June 2017 and are due to be submitted to the European Union (EU) in December 2017. More accurate modelling of surface water, the updated Flood Map for Surface Water, (Risk of Flooding from Surface Water) has been made available since the 2011 PFRA was published, which means there is more potential for surface water related Flood Risk Areas.

F.1.3 Flood Risk Management Plans (FRMPs)

Under the Regulations the Environment Agency exercised an 'Exception' and did not prepare a PFRA for risk from rivers, reservoirs and the sea. Instead they had to prepare and publish a FRMP. The FRMP summarises the flooding affecting the area and describes the measures to be taken to address the risk in accordance with the Flood Risk Regulations.

The study area falls within the Severn River Basin District. The [River Basin District Flood Risk Management Plan](#) (FRMP) were issued in March 2016 and covers the period of 2015 to 2021. The FRMP draws on policies and actions identified in Catchment Flood Management Plans and incorporates information from Local Flood Risk Management Strategies. Appendix C for the FRMPs contain proposed measures to manage flood risk. The Plan will be updated as part of the new cycle of the Flood Risk Regulations and is due to be published in December 2021.

F.1.4 Flood and Water Management Act (FWMA), 2010

Following the 2007 floods, Sir Michael Pitt was appointed to chair an independent review into the floods. The [final report](#) was published in June 2008. The [Flood and Water Management Act](#) (2010) implements Sir Michael Pitt's recommendations and aims to create a simpler and more effective means of managing both flood risk and coastal erosion.

The FWMA established Lead Local Flood Authorities (LLFAs).

F.1.5 Local Flood Risk Management Strategies

South Gloucestershire Council, in their role as LLFAs, are responsible for developing, maintaining, applying and monitoring a Local Flood Risk Management Strategy (LFRMS). The Strategy is used as a means by which the LLFA co-ordinate flood risk management on a day to day basis. The Strategies also set measures to manage local flood risk i.e. flood risk from surface water, groundwater and Ordinary Watercourses.

The high-level objectives for managing flood risk, proposed in South Gloucestershire Council's [LFRMS](#) are:

1. Prioritise and implement improvements to local flood infrastructure to reduce the likelihood of flooding causing harm to the communities, businesses and the environment of South Gloucestershire
2. Increase public awareness of the level of flood risk affecting communities and businesses and how they can better protect themselves and their property
3. Actively work with other Lead Local Flood Authorities and Risk Management Authorities to coordinate management and reduce flood risk across South Gloucestershire
4. Contribute to wider social, economic, environmental and cultural benefits by encouraging sustainable multi-benefit solutions and maximising use of resources
5. Improve our understanding of drainage assets, flood risk and how climate change will influence future flood risk
6. Ensure future development considers all known flood risks and climate change projections for South Gloucestershire

F.1.6 The National Flood and Coastal Erosion Risk Management Strategy for England (2011)

The [National Flood and Coastal Erosion Risk Management Strategy for England](#) provides the overarching framework for future action by all risk management authorities to tackle flooding and coastal erosion in England. It was prepared by the Environment Agency with input from Defra.

The Strategy builds on existing approaches to flood and coastal risk management and promotes the use of a wide range of measures to manage risk. It describes how risk should be managed in a co-ordinated way within catchments and along the coast and balance the needs of communities, the economy and the environment.

The strategy encourages more effective risk management by enabling people, communities, business, infrastructure operators and the public sector to work together to:

- ensure a clear understanding of the risks of flooding and coastal erosion, nationally and locally, so that investment in risk management can be prioritised more effectively;

- set out clear and consistent plans for risk management so that communities and businesses can make informed decisions about the management of the remaining risk;
- manage flood and coastal erosion risks in an appropriate way, taking account of the needs of communities and the environment;
- ensure that emergency plans and responses to flood incidents are effective and that communities are able to respond effectively to flood forecasts, warnings and advice; and,
- help communities to recover more quickly and effectively after incidents.

F.2 National Planning Policy and Guidance

The [National Planning Policy Framework](#) (NPPF) was issued in 2012 to replace the previous documentation as part of reforms to make the planning system less complex and more accessible, and to protect the environment and promote sustainable growth. It replaces most of the Planning Policy Guidance Notes (PPGs) and Planning Policy Statements (PPSs). The NPPF sets out the Government’s requirements for the planning system and provides a framework within which local people and councils can produce distinctive local and neighbourhood plans to reflect the needs and properties of their communities. The NPPF must be taken into account by local planning authorities when preparing Local Plans and for applicants preparing planning submissions.

[National Planning Practice Guidance](#) (NPPG) was published in 2014 and sets out how the NPPF should be implemented. [NPPG: Flood Risk and Coastal Change](#) advises on how planning can account for the risks associated with flooding and coastal change in plan making and the application process. It sets out Flood Zones, the appropriate land uses for each zone, flood risk assessment requirements, including the Sequential and Exception Tests and the policy aims for developers and authorities regarding each Flood Zone.

The Sequential Test

“The Sequential Test ensures that a sequential approach is followed to steer new development to areas with the lowest probability of flooding. The flood zones, as refined in the Strategic Flood Risk Assessment for the area, provide the basis for applying the Test. The aim is to steer new development to Flood Zone 1 (areas with a low probability of river or sea flooding). Where there are no reasonably available sites in Flood Zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2 (areas with a medium probability of river or sea flooding), applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required”.

The Exception Test

“The Exception Test, as set out in paragraph 102 of the NPPF, is a method to demonstrate and help ensure that flood risk to people and property will be managed satisfactorily, while allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available.

Essentially, the two parts to the Test require proposed development to show that it will provide wider sustainability benefits to the community that outweigh flood risk, and that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall.”.

(National Planning Practice Guidance, paragraph 023)

F.2.1 South Gloucestershire local strategies and policies

South Gloucestershire Council have built upon the national guidance and set out local strategies and policies to meet housing and economic development growth.

The [Planning policies and guidance document](#) expands the NPPF, setting out the local policy relating to drainage infrastructure, including the Core Strategy, the Policies, Sites and Places Development Plan and the SFRA,

The [Developers and Designers document](#) defines the process and what is required when submitting drainage proposals for new developments, including FRAs and advice on sustainable drainage, development drainage strategies and other design issues

The [Land and Homeowners document](#) provides guidance on a range of issues relating to the impact of development and land use management on local drainage and flood risk management.

F.3 Surface water and SuDS

On 18 December 2014 a [Written Ministerial Statement](#) laid by the Secretary of State for Communities and Local Government set out changes to the planning process that would apply for major development from 6 April 2015.

Major developments are defined as

- residential development: 10 dwellings or more, or residential development with a site area of 0.5 hectares or more where the number of dwellings is not yet known; and
- Non-residential development: provision of a building or buildings where the total floor space to be created is 1,000 square metres or more or, where the floor area is not yet known, a site area of 1 hectare or more.

When considering major planning applications, Local Planning Authorities should consult the LLFA on the management of surface water in order to satisfy that:

- the proposed minimum standards of operation are appropriate
- there are clear arrangements for on-going maintenance over the development's lifetime, through the use of planning conditions or planning obligations.

In March 2015 the LLFA was made a statutory consultee which came into effect on 15 April 2015. As a result, South Gloucestershire Council, are required to provide technical advice on surface water drainage strategies and designs put forward for new major developments.

F.3.1 Defra Non-Statutory Technical Standards for SuDS

On March 23 2015, the Department for Environment, Food and Rural Affairs (Defra) published the [Non-Statutory Technical Standards for SuDS](#). The standards should be used in conjunction with the NPPF and NPPG. These standards cover the following

- Flood risk outside the development
- Peak flow control
- Volume control
- Flood risk within the development
- Structural integrity
- Designing for maintenance considerations
- Construction

F.3.2 SuDS or Surface Water Guidance

South Gloucestershire Council has produced [a Surface Water Management document](#); this sets out how sustainable drainage should be delivered in South Gloucestershire. The document provides general SuDS advice for developers, including a flow diagram of the SuDS design process, data and information requests, what technical advice the council provides and a checklist of what information needs to be included with a planning application submission.

F.3.3 C753 CIRIA SuDS Manual (2015)

The [C753 CIRIA SuDS Manual](#) (2015) replaces and updates the previous version (C697) providing up to date guidance on planning, design, construction and maintenance of SuDS. The document is designed to help the implementation of these features into new and existing developments, whilst maximising the key benefits regarding flood risk and water quality. The manual is divided into five sections ranging from a high-level overview of SuDS, progressing to more detailed guidance with progression through the document. It is recommended that

developers and the LPA utilise the information within the manual to help design SuDS which are appropriate for a development.

F.4 Shoreline Management Plans

The Shoreline Management Plan (SMP) forms part of the Defra's strategy for flood and coastal defence. It provides a large-scale assessment of risks associated with coastal evolution and presents the policy framework to address these risks in a sustainable manner. The SMP policies defined by DEFRA are:

- **Hold the line** – maintain or upgrade the level of protection provided by defences.
- **Advance the line** – build new defences seaward of the existing defence line.
- **Managed realignment** – allowing retreat of the shoreline, with management to control or limit the movement.
- **No active intervention** – a decision not to invest in providing or maintaining defences.

Oldbury on Severn falls within the Severn Estuary Shoreline Management Plan (2006)¹ and its policies for shoreline management should be borne in mind when considering development within Oldbury on Severn.

The SMP policy for the coastline at Oldbury on Severn is 'Hold the Line'. This policy aims to keep the line of defence in approximately the same location as it is now. Existing defences will be maintained, replaced or upgraded along their current alignment; this may include upgrades to counter climate change and sea level rise.

F.5 Catchment Flood Management Plans

Catchment Flood Management Plans (CFMPs) are a high-level strategic plan providing an overview of flood risk across each river catchment. The Environment Agency use CFMPs to work with other key-decision makers to identify and agree long-term policies for sustainable flood risk management.

There are six pre-defined national policies provided in the CFMP guidance and these are applied to specific locations through the identification of 'Policy Units'. These policies are intended to cover the full range of long-term flood risk management options that can be applied to different locations in the catchment.

The six national policies are:

1. No active intervention (including flood warning and maintenance). Continue to monitor and advise.
2. Reducing existing flood risk management actions (accepting that flood risk will increase over time).
3. Continue with existing or alternative actions to manage flood risk at the current level (accepting that flood risk will increase over time from this baseline).
4. Take further action to sustain the current level of flood risk (responding to the potential increases in risk from urban development, land use change and climate change).
5. Take action to reduce flood risk (now and/or in the future).
6. Take action with others to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits, locally or elsewhere in the catchment.

The study area is covered by the [Severn Tidal Tributaries CFMP](#). Oldbury on Severn lies within the Avonmouth and Severnside Sub Area. This sub area has been allocated as Policy Option 4 – areas of low, moderate or high flood risk where flood risk is already being managed effectively but where further actions may be needed to keep pace with climate change.

F.6 River Basin Management Plans

River Basin Management Plans (RBMPs) are prepared under the Water Framework Directive (WFD) and assess the pressure facing the water environment in River Basin Districts. The study area falls within the Anglian, Humber and Severn River Basin Districts.

¹ <http://www.se-coastalgroup.org.uk/wp-content/uploads/2013/10/Beachy-Head-to-Selsey-Bill-SMP-FINAL.pdf>

The updated 2015 Severn RBMPs identifies a number of pressures on the water environment and significant water management issues. The RBMP describes how development and land-use planning needs to consider several issues relevant to the RBMP including sustainable drainage systems, green and blue infrastructure, sewage treatment options (tertiary phosphate treatments), water efficiency measures, infrastructure and development locations and the reduction of nutrients from diffuse pollution. The RBMP provides a summary of measures to protect and improve the water environment in the river basin district. One action relevant to flood risk in the RBMP is the need to renaturalise heavily modified watercourses, to restore natural floodplains, remove obstructions and slow down the rate of flow.

F.7 Lower Severn Internal Drainage Board (IDB)

The IDB's Policy statement on flood protection and water level management sets out the Board's approach to its management of flood risk and water levels in its areas. The IDB's policy and approach is consistent with the Government's aims and objectives for flood and coastal defence.

The Lower Severn IDB website also contains information and guidance for developers and residents within the board's areas including

- Guide for development
- Land drainage byelaws
- Specification and standard conditions for structures in watercourses

F.8 Roles and responsibilities of Risk Management Authorities

The roles and responsibilities of Risk Management Authorities (RMAs) in study area are summarised below.

F.8.1 Local Planning Authorities

The Local Planning Authorities (LPAs), assess, consult on and determine whether development proposals are acceptable, ensuring that flooding and other, similar, risks are effectively managed.

The LPAs will consult relevant statutory consultees as part of planning application assessments and may, in some cases, also contact non-statutory consultees (such as Lower Severn Internal Drainage Board and Severn Trent Water) that have an interest in the planning application.

F.8.2 Lead Local Flood Authorities

As LLFA, South Gloucestershire Council's duties include:

- Local Flood Risk Management Strategy (LFRMS): LLFAs must develop, maintain, apply and monitor a LFRMS to outline how they will manage flood risk, identify areas vulnerable to flooding and target resources where they are needed most.
- Flood Investigations: When appropriate and necessary LLFAs must investigate and report on flooding incidents (Section 19 investigations).
- Register of Flood Risk Features: LLFAs must establish and maintain a register of structures or features which, in their opinion, are likely to have a significant effect on flood risk in the LLFA area.
- Designation of Features: LLFAs may exercise powers to designate structures and features that affect flood risk, requiring the owner to seek consent from the authority to alter, remove or replace it.
- Consenting: When appropriate LLFAs will perform consenting of works on ordinary watercourses.

F.8.3 Environment Agency

The Environment Agency is responsible for protecting and enhancing the environment and contributing to the Government's aim of achieving sustainable development in England and Wales. The Environment Agency has powers to work on Main Rivers to manage flood risk. These powers are permissive, which means they are not a duty, and they allow the Environment Agency to carry out flood and coastal risk management work and to regulate the actions of other flood risk management authorities on main rivers and the coast.

The EA also has powers to regulate and consent works to Main Rivers. Prior written consent is required from the Environment Agency for any work in, under, over or within nine metres of a Main

River or between the high water line and the secondary line of defence e.g. earth embankment. The Environment Agency also has a strategic overview role across all types of flooding as well as other types of water management matters

F.8.4 Internal Drainage Boards

IDBs are local public authorities that manage water levels. They are an integral part of managing flood risk and land drainage within areas of special drainage need in England and Wales. The Lower Severn IDB operates in the study area, maintaining pumping stations and drainage channels in the Rhine system.

Roles and responsibilities for IDBs include the following

- IDBs have permissive powers to undertake work to provide water level management within their Internal Drainage District. They undertake works to reduce flood risk to people and property and manage water levels for local needs, this includes the maintenance of rivers, drainage channels, outfalls and pumping stations
- They input into the planning system by facilitating the drainage of new and existing developments within their districts and advising on planning application. However, they are not a statutory consultee to the planning process
- In some cases, a development meeting the following criteria may be required to submit an FRA to the IDB to support any consent applications
 - Development within or adjacent to a drain/watercourse, and/or flood defence structure within the area of an IDB
 - Development within the channel of any ordinary watercourse within an IDB area
 - Where direct discharge of surface water or treated effluent is proposed into an IDB catchment
 - Any development proposal affecting more than one watercourse in an IDBs area and having possible strategic implications
 - Development in an IDB that is an area of known flood risk
 - Development within the maintenance access strips provided under the IDBs bylaws
 - Any other application that may have material drainage implications.
- Some IDBs have other duties, powers and responsibilities under specific legislation.

F.8.5 Water and wastewater providers

Severn Trent Water are the sewerage undertakers for Oldbury on Severn. They have the responsibility to maintain surface, foul and combined public sewers to ensure the area is effectively drained. When flows (foul or surface water) are proposed to enter public sewers, Severn Trent Water will assess whether the public system has the capacity to accept these flows as part of their pre-application service. If there is not available capacity, they will provide a solution that identifies the necessary mitigation. Severn Trent Water also comments on the available capacity of foul and surface water sewers as part of the planning application process. Further information can be found on [Severn Trent Water's website](#).

Severn Trent Water also supply potable water. Consent, prior to commencing work, is required from the relevant provider if installing water systems, or altering existing systems, is intended.

F.9 When to consult Risk Management Authorities

Table F-1: When to consult Risk Management Authorities

Key authority	When to consult
Local Planning Authority	Pre-application consultation is recommended to identify the range of issues that may affect the site and, following on from the Sequential and, if necessary, Exception Test, determine whether the site is suitable for its intended use. Should be consulted where an awarded watercourse runs within or adjacent to proposed development consultation

Key authority	When to consult
Environment Agency	Should be consulted on development, other than minor or as defined in the Environment Agency's Flood Risk Standing Advice document within Flood Zone 2 or 3, or in Flood Zone 1 where critical drainage problems have been notified to the LPA. Consultation will also be required for any development projects within 20m of a Main River or flood defence, and other water management matters.
South Gloucestershire Council (LLFA role)	Where the proposed work will either affect or use an ordinary watercourse or require consent permission, outside of an IDB's rateable area. As of the 15th April 2015 the LLFA should be consulted on surface water drainage proposal for all major developments
Local Highway Authority	Where the proposed development will either involve a new access to the local highway network or increase or change traffic movements
Highways England	When the quality and capacity of the Highways England (strategic) road network could be affected.
Historic England	Whilst Historic England are not a WMA, they should be consulted where proposals may affect heritage assets and their settings.
Natural England	Natural England has mapped 'risk zones' to help developers and LPAs determine whether consultation is required. This is likely where water bodies with special local or European designations (e.g. SSSI or Ramsar) exists
Severn Trent Water	Where connection to surface water sewers is required, or where the flow to public sewerage system may be affected Where new connections to the water supply network are required or if any alterations are made to existing connections