Local Government Association

Framework
to assist the development of the
Local Strategy for Flood Risk Management

‘A Living Document’

2nd Edition, November 2011

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Executive Summary

Flood and coastal erosion risk in England is increasing due to climate change and development in areas at risk. It is not possible to prevent all flooding or coastal erosion, but there are actions that can be taken to manage these risks and reduce the impacts that they may have on communities.

This framework, produced by the Local Government Association, will be of particular interest to Lead Local Flood Authorities (LLFAs) as designated by the Flood and Water Management Act 2010. However, it is expected that all flood and coastal management organisations in England will find areas of the document relevant.

While avoiding prescription, this framework is structured to inform LLFAs of the key local flood risk management issues that should be considered in the development of their own local strategy. It builds on existing approaches to flood and coastal erosion risk management (FCERM) and promotes the use of a wider range of measures to manage risk.

In the development of their Local Flood Risk Management Strategy, LLFAs should balance the needs of communities, the economy and the environment. The Flood and Water Management Act prescribes some basic elements that must be in the Local Strategy, but it is important to bear in mind that the Local Strategy will form the framework within which communities should have a greater say in local risk management decisions, and are supported in becoming better informed about flood risk issues generally. Local Flood Risk Management Strategies must be consistent with the National Flood and Coastal Erosion Risk Management Strategy which was approved by Parliament in July 2011

The Local Flood Risk Management Strategy, in combination with the National Flood and Coastal Erosion Management Strategy, will encourage more effective risk management by enabling people, communities, business and the public sector to work together to:

- ensure a clear understanding of the risks of flooding and erosion, nationally and locally, so that investment in risk management can be prioritised more effectively
- set out clear plans for risk management so that communities and businesses can make informed decisions about the management of the residual risk
- encourage innovative management of flood and coastal erosion risks, taking account of the needs of communities, businesses, and the environment
- form links between the Local Flood Risk Management Strategy and local spatial planning
- ensure that emergency plans and responses to flood incidents are effective and that communities are able to respond properly to flood warnings
- help communities to recover more quickly and effectively after incidents

It will do this by acting as the evidence base for the decisions and actions required for managing flood risk. Therefore, although it is a statutory requirement that the LLFA develop the Local Strategy in consultation with flood risk management authorities and the public, from a practical standpoint there are substantial benefits in ensuring local communities acquire a better understanding of local risk management, co-ordinated planning and sustainability. It will also emphasise the need to balance national and local activities and funding.

The Local Government Association welcomes any views or feedback on this framework, but emphasises that it is a 'living document'. The need for additional review and maintenance to the content of this framework is recognised as legislation, national strategy and other changes occur in FCERM emerge.

Foreword

The Flood and Water Management Act gives Lead Local Flood Authorities very welcome new powers to help manage local flood risk in a more strategic way. It acknowledges the central role of local authorities in co-ordinating action at the local level and places a duty to co-operate on key partners to support authorities in their new role.

Many councillors and councils will already have direct experience of the effects and aftermath of flooding; others will be aware of the risks and impacts through media reports. In some places, such as low lying coast or near major rivers, the risk of flooding is obvious; in built-up areas where local watercourses are hidden in culverts, risks may not be apparent. Recent events have shown that flooding from surface water and rivers, or coastal inundation are possibilities that many communities face. So, it is important that all communities have a better awareness and understanding of flooding and the actions they can take to minimise risk. We must ensure that existing risk is managed well and decisions that councils and their partners take do not increase risk either in their own area or within wider catchments. It is essential that we all take a more strategic approach to the way we manage flood risk and grasp the opportunity provided by new legislation to demonstrate leadership in managing and reducing this risk.

Lead Local Flood Authorities have a key duty to develop a Local Strategy for flood risk management. Each Local Strategy must be consistent with the national strategy and will set out a clear vision for managing flood risk, reflecting local circumstances such as the level of risk and the potential impacts of flooding.

The Local Government Association supports the local government sector in taking the lead in this area of responsibility. It is important that we make a confident start in improving flood risk management. We have produced this Framework to help Lead Local Flood Authorities develop their strategies to manage local flood risks under the Flood and Water Management Act 2010. We are pleased to acknowledge the support and advice we have received from the Environment Agency and Defra in developing the Framework.

This is a refresh of the initial Framework published in February 2011 and takes into account the publication of the National Flood and Coastal Erosion Risk Management Strategy. It has been published by the LGA's Inland Flood Risk Management Group, which advises the Local Government Group's Environment and Housing Programme Board.

Many local authorities have already demonstrated excellent leadership on flood risk management and the progress they have made has helped to inform this Framework. We hope that the Framework will provide a useful guide for all flood authorities in developing their local strategy and building their capacity to manage flooding more effectively in the future.

Cllr Andrew Cooper
Chair, LGA Inland Flood Risk Management Group

Acknowledgements

The Local Government Association is grateful to the organisations that have supported and contributed to this 'living document'. The Inland Flood Risk Management Group has produced this Framework through its Officer Network. The original project was led by local authority officers in Somerset, Lincolnshire, Essex, Hampshire and Gloucestershire, and supported by colleagues in the Welsh Local Government Association, the Environment Agency, and the Department for Environment, Food, and Rural Affairs.

The organisations that contributed to the development and review of this revised document include:

Cambridgeshire County Council
East Sussex County Council
Essex County Council
Gloucestershire County Council
Hampshire County Council
Hertfordshire County Council
Lincolnshire County Council
Local Government Association (LGA)
Somerset County Council
Welsh Local Government Association (WLGA)

Department for Communities and Local Government (DCLG)
Department for Environment, Food, and Rural Affairs (Defra)

Environment Agency

URS/Scott Wilson - Environment and Natural Resources

1 Introduction

Flooding is a natural phenomenon, the adverse consequences of which can be exacerbated by poor management of the landscape and the environment. If we do not properly consider the risks of flooding and take steps to manage and reduce them, then the problem will worsen as the effects of climate change take hold.

The location and severity of flooding, particularly flooding caused by locally extreme rainfall, is very difficult to predict. Dealing with uncertainties that are effectively out of our control can be challenging. However, flood *risk* is something that can be understood and its effects are generally predictable. This means that the impacts can be mitigated, up to a point, and response and recovery can be more effective and efficient. Whilst this framework acknowledges that flooding is a natural process, over time local authorities will increase their level of understanding of local flood risk management and of the level of risk posed by flooding to community safety as well as the potential economic and environmental impacts of flooding.

This framework aims to provide the tools and signposting to enable LLFAs in England to consider what actions they might include in the development of their Local Flood Risk Management Strategy to reduce, manage and mitigate the effects of flooding. It must be recognised that it is not possible to prevent all flooding and erosion. This is a fundamental issue which relates to expectation management, and it should be at the forefront of LLFA thinking, especially when engaging with communities.

A key principle of this framework is the need for LLFAs to adopt adaptive management techniques. Their local flood risk strategies will need to be treated as 'living documents'. As new technical information associated with flood risk management evolves, and real events occur, the strategy will need to change to take this new information into account. Adaptive management for flood risk reduction requires high quality, well organised and accessible technical information. Exactly the same principles will be applied to this framework document and the LGA will make necessary provision for review, maintenance and update of this guidance.

Local Flood Risk Management Strategies will be informed by ongoing programme reviews, economic impact risk assessments, information from real flooding events, and a systematic approach for assessing risk to areas that depend on flood protection infrastructure. As LLFAs gain a more complete understanding of the condition of their flood protection assets and the associated flood risk, strategy implementation will need to be adjusted accordingly.

Adaptive management approaches to strategy implementation require a commitment to information management. Emerging data, maps, and studies will need to be maintained in an accessible and organised format. Informed decision-making will ensure that limited financial resources will be directed in the most cost-effective way possible, on a risk-based approach.

LLFAs should build on their long history of coordinating and partnering with stakeholders and risk management partners to reduce inland flood risk and contribute towards sustainable development. Pre-existing partnerships and relationships will be strengthened while new collaborative opportunities will be developed.

The local flood risk management strategy will encourage lead local flood authorities to provide a wider range of measures to manage local flooding in a co-ordinated way that balances the needs of communities, the economy and the environment.

2 How to use this framework

This framework will be of particular interest to LLFAs as defined in the Flood and Water Management Act 2010. However, it is expected that all flood and coastal management organisations in England will find areas of the document useful.

Whilst this framework is not specifically directed at local authorities in Wales, the LGA has worked closely with the Welsh Local Government Association in its development. In due course, the Welsh Assembly Government will consider issuing similar guidance that would take into account how the national and local strategies should relate to one another with respect to the needs of communities in Wales.

This framework is structured to inform LLFAs of key local flood risk management issues that should be considered in the development of their own local strategy. The LGA recognises the differing social, economic, political and geographical factors that affect decision-making in local authorities. As such, this guidance is not intended to be prescriptive or directive, rather it is intended to raise key issues for consideration and application to the specific conditions that exist locally.

In summary, the objectives of this framework are

- to develop guidance to support all lead local flood authorities in England when preparing the local strategy consistent with Section 9 of the Flood and Water Management Act 2010
- to help local authorities identify early actions to reduce flood risk
- to suggest ways of maintaining consistency with the national strategy
- to consider how local strategies will inform ongoing development
- to consider data and information sharing, management, and co-operation
- to provide guidance on how to communicate with the public, raise awareness, and encourage local leadership
- to encourage cross boundary working and consideration of risks and management actions that cut across political boundaries
- to provide advice on the scale of Strategic Environmental Assessment (SEA) needed
- to provide advice on partnerships and governance arrangements

Where specific activities are identified within this framework, which lead local flood authorities might wish to consider when developing their local strategy, they are highlighted in the following format:

What you need to consider for your local strategy....

Case studies are highlighted in the following format:

Case Study

There are many documents sign-posted from this framework; the majority of which are in the form of web-based hyperlinks differentiated by text that is underlined and highlighted in blue.

This is a 'living document' and legislation and other guidance continues to be developed. This document will be regularly maintained to ensure it remains up-to-date and accurate.

If you have any feedback, or would like other information to be contained in the framework, please email Jo Allchurch at the LGA (Jo.Allchurch@local.gov.uk).

3 Background

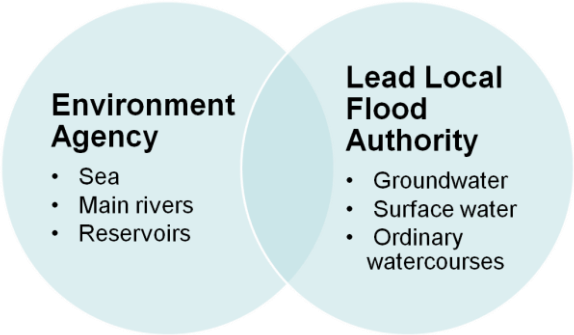
In June 2008, Sir Michael Pitt published his final report: 'Learning Lessons from the 2007 Floods', which called for urgent and fundamental changes in the way the country is adapting to the increased risk of flooding. The report states that local authorities should play a major role in the management of local flood risk, taking the lead in tackling problems of local flooding and co-ordinating all relevant agencies.

The Flood and Water Management Act 2010 is an important part of the Government's response to the Pitt Report. The Act is intended to create a more integrated, comprehensive and risk-based regime for managing the risk of flood and coastal erosion, including identifying clear responsibilities. In light of this, local authorities will take on new powers extending the existing responsibilities for local flood risk management.

Local flood risk is defined as a risk of flood arising from surface run-off, groundwater, or an ordinary watercourse, which includes a lake or pond which flows into an ordinary watercourse. The Environment Agency is responsible for managing the risk of flooding from the sea and main rivers, and also for regulating the safety of reservoirs. Where there is an interface between the sea and main rivers with local flood risk sources (for example, tide locking) it is the responsibility of the lead local flood authority to consider the impacts and consequences.

The Act gives County Councils or Unitary Authorities a new leadership role in local flood risk management, in partnership with a new national leadership role for the Environment Agency. As LLFAs, upper tier Authorities also have a new operational role to manage surface water flooding as well as responsibility for developing, maintaining and applying a Local Flood Risk Management Strategy. This clarifies who is responsible for local flood risk and enables effective partnerships to be formed between the lead local flood authority and the other relevant authorities.

Figure 1 – Responsibilities for the Environment Agency and Lead Local Flood Authorities



There is no statutory deadline for producing the Local Strategy, nor is there prescribed format or scope beyond the legislative requirements contained in the Act itself, hence the production of the present framework document.

LLFAs will need to consider and determine the exact scope of their Local Strategies. This will reflect local circumstances, aspirations and priorities more broadly, not least the extent to which the focus on local flood risk is linked to broader issues of coastal and

fluvial flood risk. To some extent the nature and prevalence of flood risk locally will shape the scope of the Local Strategy, while the achievement of a proportionate, risk-based approach to flood risk will require a balance between local and national priorities as they affect the area covered by the Local Strategy.

The LGA has been asked on a number of occasions whether each LLFA must have its own Local Strategy, or whether they can combine to produce joint Strategies. There is no prescription in this area. LLFAs cannot delegate the duty to ensure that a Local Strategy is in place, but there is no prohibition from developing joint Strategies covering a number of different LLFAs.

Such an approach might be the most appropriate one in an area where a number of geographically smaller LLFAs are grouped within a hydrological catchment area. Equally hydrological systems run across the administrative boundaries of larger LLFAs. These authorities will need to liaise with their neighbours to ensure that activities in one location do not create or increase problems in another. However, LLFAs will also need to consider how they will exercise matters of local discretion, such as allocation of funding and establishing effective scrutiny and governance arrangements in a joint environment.

4 Legislative context

This section is a quick guide to the legislative changes that have occurred because of the two key pieces of legislation, the Flood and Water Management Act 2010 and the Flood Risk Regulations 2009. It also highlights other pieces of legislation that should be considered when developing the strategy. It should be used to help determine what roles local risk management authorities should have in the strategy (and perhaps provide guidance on how they can achieve them) and to advise what other pieces of legislation should be considered and perhaps referred to in the strategy. Those implementing the Act and the Regulations should read the original text to be aware of their full meaning and intention to assist with correct interpretation of the requirements.

Introduction

Following Royal Assent in April 2010 the Flood and Water Management Bill became an Act of Parliament. LLFAs have taken on new powers and duties extending their previous responsibilities for flood risk management and will therefore need to take resource and organisational decisions to deliver the new legislative requirements.

The two key drivers behind the new legislation are the review in to the summer 2007 floods by Sir Michael Pitt, most often referred to as the Pitt Review, and the other is the EU Floods Directive, which was passed as a result of widespread flooding in Europe, and which has been transposed into UK law by the Flood Risk Regulations, 2009**.**

In June 2008, Sir Michael Pitt published his final report: 'Learning Lessons from the 2007 Floods', which called for urgent and fundamental changes in the way the country is adapting to the increased risk of flooding. The report includes 92 recommendations, of which 21 are specifically designated to local authorities.

The floods in summer 2007 proved that there were significant gaps in the powers held by various bodies in trying to reduce and respond to the risk of flooding. The Governments response to the Pitt Review included the Flood and Water Management Act 2010. This puts in place many of the changes recommended by Sir Michael Pitt in the aftermath of the 2007 floods, allowing for wider changes to the roles and responsibilities of the relevant bodies.

The Flood and Water Management Act 2010 aims to provide better, more comprehensive management of flood risk for people, homes and businesses.

The Act defines the following bodies as 'risk management authorities'

- a Lead Local Flood Authority
- the Environment Agency
- a district council for an area for which there is no unitary authority
- an internal drainage board
- a water company
- a highway authority

All risk management authorities have the following new responsibilities under the provisions of the Act

- a duty to cooperate with and provide information to other risk management authorities

- ability to take on flood and coastal erosion functions from another risk management authority when agreed by both sides

Each risk management authorities also has the following specific responsibilities

Lead local flood authorities

New roles and responsibilities contained within the Act include:

- development, maintenance, application and monitoring of a strategy for local flood risk management in the jurisdiction of the lead local flood authority

- strategic leadership of local risk management authorities. It is recommended that this is done through the formation of a local flood partnership between lead local flood authorities and other risk management authorities

- powers to request information from any person in connection with the authority's flood and coastal erosion risk management functions

- a duty to investigate and publish reports on flooding incidents in its area (where appropriate or necessary) to identify which authorities have relevant flood risk management functions and what they have done or intend to do

    - a duty to maintain a register of structures or features which have a significant effect on flood risk in their area, in the view of the lead local flood authority

    - power to do works to manage flood risk from surface runoff or groundwater

    - power to designate structures and features that could affect flooding and are considered to be significant when assessing local flood risk

    - a duty to establish a Sustainable Drainage Systems (SuDS) Approving Body (SAB) with responsibility for approval of all drainage plans and the adoption and maintenance of SuDS that serve more than one property in new developments (implementation expected by October 2012)

    - decision-making responsibility for whether works on ordinary watercourses by third parties that may affect water flow can take place (internal drainage boards will still have this role on ordinary watercourses in their system). Clarification is needed in this area. It has not yet been commenced because of complications in the legislation.

    - a duty to exercise flood or coastal erosion risk management functions in a manner consistent with the national strategy

- a duty to aim to contribute towards the achievement of sustainable development in the exercise of flood or coastal erosion risk management functions and to have regard to any Ministerial guidance on this topic

Environment Agency

New roles and responsibilities contained within the Act include

- strategic overview for all forms of flooding
- development of a National Strategy for Flood and Coastal Erosion Risk Management (FCERM) to cover all forms of flooding
- the conversion of Regional Flood Defence Committees into Regional Flood and Coastal Committees with a new remit to include coastal erosion issues
- powers to request information from any person in connection with the Environment Agency's flood and coastal erosion risk management functions
- power to designate structures and features that affect flooding or coastal erosion
- powers to cause flooding and erosion for nature conservation and cultural heritage reasons, and people's enjoyment of these
- a duty to have regard to FCERM in carrying out other work that may affect FCERM
- a duty to have regard to Local Flood Risk Management Strategies
- a duty to report to Ministers about flood and coastal erosion risk management including application of the national strategies for England and Wales. This report covers all sources of flood risk and where applicable its management by all relevant Risk Management Authorities
- statutory consultees to the SuDS approving body on sustainable drainage that impacts water quality or strategic flood risk

Continuing roles and responsibilities contained within the Act include:

- responsibility for coastal flooding
- responsibility for fluvial flooding from main rivers
- duty to contribute to sustainable development in discharging their FCERM functions
- ability to issue levies to lead local flood authorities for an area, although levies can now also apply in relation to coastal erosion issues as well as flooding
- updated provisions for the regulation of reservoirs.

Water Companies

New roles and responsibilities contained within the Act

- duty to act consistently with the national strategies and to have regard to local strategies when carrying out their flood risk management functions

- duty to be subject to scrutiny from lead local flood authorities' democratic processes in respect of their flood risk management functions

- adoption of private sewers

District and Borough Councils

New roles and responsibilities

- power to designate structures and features that affect flooding or coastal erosion

- duty to exercise their flood risk management functions in a manner consistent with local and national strategies, and to have regard to those strategies in their other functions

- duty to be subject to scrutiny from lead local flood authorities' democratic processes

Continuing roles and responsibilities

- power to do works on ordinary watercourses and, with the Environment Agency's consent, the sea

Internal Drainage Boards (IDBs)

- power to designate structures and features that affect flooding or coastal erosion

- powers to cause flooding and erosion for nature conservation and cultural heritage reasons, and people's enjoyment of these

- duty to exercise their functions in a manner consistent with local and national strategies

- duty to be subject to scrutiny from lead local flood authorities' democratic processes

- ability to work in consortia with other IDBs

- statutory consultees to the SuDS approving body on sustainable drainage that impacts land drainage

Continuing roles and responsibilities

- power to do works on ordinary watercourses flooding within their boundary and, with the Environment Agency's consent, the sea.

Section 9 of the Flood and Water Management Act details the statutory requirements for Local Flood Risk Management Strategies (see section 10 on Wales for the differences for councils in Wales)

It states that an LLFA must develop, maintain, apply and monitor a strategy for local flood risk management in its area for the following forms of flood risk

- surface runoff
- groundwater
- ordinary watercourses

The strategy must specify the following

- the risk management authorities in the authority's area

- the flood and coastal erosion risk management functions that may be exercised by those authorities in relation to the area

- the objectives for managing local flood risk (including any objectives included in the authority's flood risk management plan prepared in accordance with the Flood Risk Regulations 2009)

- the measures proposed to achieve those objectives

- how and when the measures are expected to be implemented

- the costs and benefits of those measures, and how they are to be paid for

- the assessment of local flood risk for the purpose of the strategy

- how and when the strategy is to be reviewed

- how the strategy contributes to the achievement of wider environmental objectives

There must be consultation with the public and any risk management authority that would be affected. The Strategy must also be consistent with the National Flood and Coastal Erosion Risk Management Strategy for England.

A summary of the Local Strategy must be published and may be accompanied by guidance on how the strategy should be applied in the area.

In October 2010, the first elements of the Act were commenced, including the responsibility to produce a Local Flood Risk Management Strategy. Preliminary Flood Risk Assessments, which are part of the Flood Risk Regulations 2009, provide the initial assessment of local flood risk and should be used as the first step in developing the Local Strategy.

Flood Risk Regulations 2009

The Flood Risk Regulations 2009 came in to force on 10 December 2009. They transpose the EU Floods Directive into UK law.

The key provisions of the Regulations are

- to give responsibility to the Environment Agency to prepare Directive deliverables – preliminary flood risk assessments, maps and plans - for floods from the sea, main river and reservoirs

- to give responsibility to lead local flood authorities (unitary and county councils) to do the same for all other forms of flooding (excluding sewer flooding which is not caused by precipitation)

- preliminary flood risk assessments (PFRAs) to be prepared by the Environment Agency and LLFAs by 22 December 2011. These should, on the basis of Environment Agency and LLFA PFRAs, identify areas of significant flood risk. LLFAs submitted their PFRAs to the Environment Agency by 22nd June 2011.

- flood hazard and risk maps to be prepared by 22 December 2013 for identified areas of significant flood risk

- flood risk management plans to be prepared by 22 December 2015 for the same areas

LLFAs have submitted their PFRAs, and will need to submit hazard and risk maps and management plans (where required) to the Environment Agency six months before the specified December deadlines to allow for review, collation, publishing and reporting to the European Commission.

The assessment, mapping and planning cycle continues thereafter on a six yearly basis with the first review of the preliminary flood risk assessment due by 22 December 2017. Flood maps must be reviewed by 22 December 2019 and flood risk management plans by 22 December 2021. Each review must take into account the likely impact of climate change on the occurrence of floods.

These reviews will involve refreshing the PFRA in the same six yearly cycle. Since the PFRA will provide much of their evidence base, this will impact on the Local Strategies too, which will need to be adapted to accommodate any changed assessment of flood risk.

Other related documents include

- Catchment Flood Management Plans
- Shoreline Management Plans
- Strategic Flood Risk Assessments (which are undertaken by Local Planning Authorities in Unitary or District Councils)
- Surface Water Management Plans (where available)

Planning Policy Statement 25 (PPS25) set out Government policy on development and flood risk. Its aims are to ensure that flood risk is taken into account at all stages in the planning process, to avoid inappropriate development in areas at risk of flooding and to direct development away from areas of highest risk. In exceptional circumstance where new development is necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and, where possible, reducing flood risk overall.

However this is soon to be replaced with the National Planning Policy Framework (http://www.communities.gov.uk/documents/planningandbuilding/pdf/1951811.pdf). The draft of this was put out for consultation between July and October 2011. The draft version has a section on climate change, flooding and coastal change, of which 5 paragraphs are devoted to flood risk. The document refers to the need for a sequential test and exception test but does not define them, so this is something the Local Strategy should refer to. In general, it is important to consider how the Local Strategy can provide local detail within the broader national framework of the new draft policy framework.

The Climate Change Act (2008) requires a UK-wide climate change risk assessment every five years, accompanied by a national adaptation programme that is also reviewed every five years. The Act has given the Government powers to require public bodies and statutory organisations such as water companies to report on how they are adapting to climate change.

The Conservation of Habitats and Species Regulations (2010) transpose the Habitats Directive into UK law. The regulations aim to help maintain and enhance biodiversity throughout the EU, by conserving natural habitats, flora and fauna. The main way it does this is by establishing a coherent network of protected areas and strict protection measures for particularly rare and threatened species. Under the Regulations, the scoping stage of the Local Strategy to determine the need for a Strategic Environmental Assessment (SEA) will indicate whether a more detailed Appropriate Assessment is needed where the Strategy could affect a designated site.

The Civil Contingencies Act (2004) is legislation that aims to deliver a single framework for civil protection in the UK and sets out the actions that need to be taken in the event of a flood. The CCA is separated into two substantive parts: local arrangements for civil protection (Part 1) and emergency powers (Part 2).

The Strategic Environmental Assessment (SEA) Directive (2001) (EC Directive 2001/42/EC) is legislation which aims to increase the consideration of environmental issues during decision making related to strategic documents such as plans, programmes or strategies. The SEA identifies the significant environmental effects that are likely to result due to the implementation of a plan, programme or strategy. Local strategies are statutory plans and are subject to the requirements of SEA. LLFAs should take a proportionate approach to applying SEA to local strategies particularly when environmental effects are not evident in the early stages of plan development. As the detail of plans develop, SEA should be reviewed.

The Land Drainage Act (1991) outlines the duties and powers to manage land drainage for a number of bodies including the Environment Agency, Internal Drainage Boards, local authorities, navigation authorities and riparian owners.

The Water Framework Directive (WFD) is a European Directive which introduces a new strategic planning process to manage, protect and improve the water environment. It

came into force on 22 December 2000 and was transposed into UK law in 2003. . Its purpose is to establish a framework for the protection of water bodies (including terrestrial ecosystems and wetlands directly dependent on them) which aims to

- prevent deterioration in the classification status of aquatic ecosystems, protect them and improve the ecological condition of waters
- achieve at least good status for all waters. Where this is not possible, good status should be achieved by 2021 or 2027
- promote sustainable use of water as a natural resource
- conserve habitats and species that depend directly on water
- progressively reduce or phase out release of individual pollutants or groups of pollutants that present a significant threat to the aquatic environment
- progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants
- contribute to mitigating the effects of floods and droughts

To implement the WFD, the Environment Agency has developed River Basin Management Plans (RBMPs), these are plans for protecting and improving the water environment. They describe the main issues for the water environment within each river basin district. They tell us, at a local level, which actions and measures we and others need to implement to achieve the objectives of the WFD.

Local strategies should be assessed for WFD compliance to ensure that local measures to reduce flood risk comply with the WFD, and should contribute to achieving WFD objectives.

The following documents have been identified as being relevant, at least in parts, to water management.

- Coast Protection Act 1949; (amended in Flood and Water Management Act)
- Land Drainage Act 1991 (amended in Flood and Water Management Act)
- Reservoirs Act 1975;
- Water Resources Act 1991; (amended in Flood and Water Management Act)
- Environment Act 1995 (amended in Flood and Water Management Act)
- Local Government Act 2000 (amended in Flood and Water Management Act)
- Water Industry Act 1991;
- Building Act 1984;
- Health Act 2009
- Highways Act 1980

Commencement of elements of the Flood and Water Management Act

Not all of the elements of the Flood and Water Management Act have been commenced yet. Elements began to be commenced in October 2010 and are likely to continue into October 2012, when elements surround Sustainable Drainage are included. The table below lists the main responsibilities which have or will be commenced and when they were or are expected to be:

Element of the Act	RMAs affected	Duty/Power	Commencement date
Development of Local Flood Risk Strategy	Lead Local Flood Authority (LLFA)	Duty	1st October 2010
Power to request information from any person re: flood and coastal erosion	LLFA, EA	Power	6th April 2011
Duty to publish flood investigation reports	LLFA	Duty	6th April 2011
Power to designate structures	LLFA, Districts and Boroughs, IDBs, EA	Power	Not yet commenced
Maintenance of asset register	LLFA	Duty	6th April 2011
SuDS Approving Body responsibilities	LLFA	Duty	Not yet commenced (expected October 2012)
Power to do works for surface runoff and groundwater	LLFA	Power	19th July 2011
Duty to act consistently with local and national strategy when carrying out their flood risk management functions	LLFA, EA, Districts and Boroughs, IDBs	Duty	19th July 2011
Duty to contribute to sustainable development	LLFA	Duty	Not yet commenced
Development of a National Strategy	EA	Duty	1st October 2010
Regional Flood and Coastal Committees	EA	Definition	1st October 2010/6th April 2011
Duty to report to Ministers	EA	Duty	19th July 2011
Consultees to SuDS Approving Body	EA, IDBs	Duty	Not yet commenced
Duty to have regard to National and Local Strategy	Water Companies and other RMAs in respect of their other functions	Duty	19th July 2011
Adoption of Private Sewers	Water Companies	Duty	1st October 2011

Duty to be subject to scrutiny from LLFA with respect to flood risk management functions	EA, Water Companies, Districts and Boroughs, IDBs	Duty	1st October 2010
Ability to work in consortia with other IDBs	IDBs	Power	1st October 2010
Consenting for Ordinary Watercourses	LLFA	Duty	Yet to be commenced
Duty to co-operate with other risk management authorities	LLFA, EA, IDBs, Water Companies, Districts and Boroughs	Duty	1st October 2010
Power to sanction persons who does not provide information	LLFA, EA	Power	18th January 2011

What you need to consider for your local strategy....

- You should consider how CFMPs, SMPs, SWMPs and SFRAs will inform your strategy
- Local Strategies should recognise and refer to relevant areas of legislation in the context of your area together with the aims and objectives set out in your local strategy. In some areas reference to coastal erosion issues may be relevant and included in the strategy
- The Act requires each risk management authority in your area to be listed to ensure the key players are properly identified. Strategies will need to highlight the responsibilities of each of the risk management authorities as this will aid understanding and clarity over roles and responsibilities
- You will need to make sure your strategy has considered equality issues and it is suggested that an equality impact assessment is completed
- Appendix A contains further information on the key legislative documents relevant to FCERM together with outputs, timescales, and responsibilities to aid the development of your Local Strategy

5 Links to National Strategy

This section outlines the overarching framework set by the National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England, and what consistency with the national strategy means in practice.

What is the National Strategy?

The Flood and Water Management Act 2010 requires the Environment Agency to develop, maintain, apply and monitor a strategy for flood and coastal erosion risk management in England. The national strategy describes what needs to be done by all the authorities involved (including the Environment Agency, local authorities, internal drainage boards, water and sewerage companies and highways authorities) to reduce the likelihood of flooding and coastal erosion, and to manage their consequences. The National Strategy became a statutory document on 18th July 2011.

[Note: A National FCERM Strategy for Wales is being produced by the Welsh Government and will establish the strategic framework for flood and coastal erosion risk management in Wales. It is expected that this will be published in the autumn.]

The overall aim of the National FCERM Strategy for England is to ensure the risk of flooding and coastal erosion is properly managed by using the full range of options in a co-ordinated way. It is designed to support local decision-making and engagement in FCERM, making sure that risks are managed in a co-ordinated way across catchments and along the coast.

The National Strategy sets out strategic aims and objectives for managing flood and coastal erosion risks and the measures proposed to achieve them. It states that Government will work with individuals, communities and organisations to reduce the threat of flooding and coastal erosion by

- Understanding the risks of flooding and coastal erosion, working together to put in place long-term plans to manage these risks and making sure that other plans take account of them

- Avoiding inappropriate development in areas of flood and coastal erosion risk and being careful to manage land elsewhere to avoid increasing risks

- Building, maintaining and improving flood and coastal erosion management infrastructure and systems to reduce the likelihood of harm to people and damage to the economy, environment and society

- Increasing public awareness of the risk that remains and engaging with people at risk to make their property more resilient

- Improving the detection, forecasting and issue of warnings of flooding, planning for and co-ordinating a rapid response to flood emergencies and promoting faster recovery from flooding

Consistency between Local Strategies and the National Strategy

The Flood and Water Management Act states that Local Strategies must be consistent with the National Strategy. Principally, this refers to consistency with the overall aims and objectives, and in particular with the six 'guiding principles'.

Guiding principles

Community focus and partnership working
Risk management authorities need to engage with communities to help them understand the risks, and encourage them to have direct involvement in decision-making and risk management actions. Working in partnership to develop and implement local strategies will enable better sharing of information and expertise, and the identification of efficiencies in managing risk.

A catchment and coastal "cell" based approach
In understanding and managing risk, it is essential to consider the impacts on other parts of the catchment or coast. Activities must seek to avoid passing risk on to others within the catchment or along the coast without prior agreement. In developing local strategies LLFAs should ensure that neighbouring LLFAs within catchments are involved in partnerships and decision making. Strategic plans such as Catchment Flood Management Plans (CFMPs) and Shoreline Management Plans (SMPs) should be used to help set strategic priorities for local strategies. Regional Flood and Coastal Committees will have an important role in this approach.

Sustainability
LLFAs should aim to support communities by managing risks in ways that take account of all impacts of flooding (for instance on people, properties, cultural heritage, infrastructure and the local economy) and the whole-life costs of investment in risk management. Where possible, opportunities should be taken to enhance the environment and work with natural processes. Risk management measures should also be forward looking, taking account of potential risks that may arise in the future and being adaptable to climate change. Government guidance has been published setting out the link between sustainable development and risk management.
http://www.defra.gov.uk/publications/2011/10/03/pb13640risk-manage-auth/

Proportionate, risk-based approaches
It is not technically, economically or environmentally feasible to prevent all flooding and coastal erosion altogether. A risk-based management approach targets resources to those areas where they have greatest effect. All aspects of risk management, including the preparation and implementation of local strategies, should be carried out in a proportionate way that reflects the size and complexity of risk. The assessment of risk should identify where the highest risks are and therefore the priorities for taking action. The Local Strategy provides an opportunity to agree a local framework for risk based decisions and interventions with local communities and stakeholders.

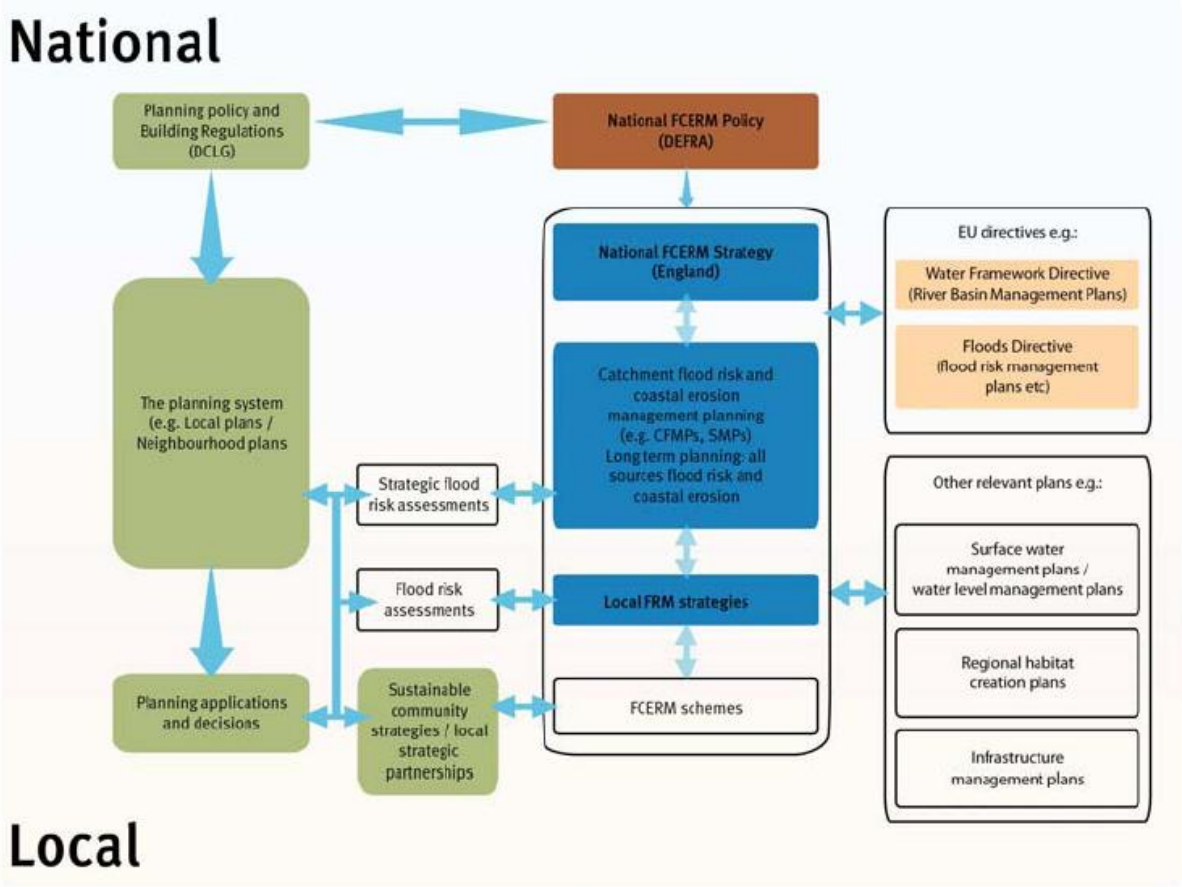
Multiple benefits
As well as reducing the risks to people and property, FCERM can bring significant economic, environmental and social benefits. In developing and implementing local strategies, LLFAs should help deliver broader benefits by working with natural processes where possible and seeking to provide environmental benefit, including those required by the Habitats, Birds and Water Framework Directive. Measures such as the use of SuDS

to manage risk should be considered wherever possible as they can also deliver benefits for amenity, recreation, pollution reduction and water quality. Further benefits can be realised in relation to regeneration, growth and emergency planning.

Beneficiaries should be allowed and encouraged to invest in local risk management
The benefits achieved when flood and coastal erosion risks are managed can be both localised and private, through the protection of specific individuals, communities and businesses. In developing local strategies, LLFAs should consider opportunities to seek alternative sources of funding for managing local flood risk rather than relying solely on Government funds. However, LLFAs should consider the balance they wish to achieve in relation to major coastal and fluvial schemes, where the scale of local contributions required to make up partial national funding may be much more significant than that usually needed for surface water management schemes.

The national strategy identifies that careful planning is required to ensure that appropriate, sustainable options are selected and that they are implemented properly. Local strategies provide an opportunity to present a clear picture of what will be done to manage risk, and bring together relevant information contained in other plans and strategies such as CFMPs, SMPs and River Basin Management Plans (prepared under the Water Framework Directive). This will help communities understand the risks they face, what they can do to manage them and how risk management authorities are working together to help manage them. They should also link with local and neighbourhood development plans. Figure 2 (below) shows the general relationship between different types of strategies and plans.

Figure 2: relationship between national and local strategies and plans



What you need to consider for your local strategy....

- **Being consistent with the national strategy** – It is your responsibility to ensure you are consistent with the national strategy. What arrangements will you put in place to ensure consistency, and how will you show this in the local strategy?

- **The Guiding Principles –** The National Strategy sets out 6 guiding principles for flood and coastal erosion risk management. You will need to consider how the principles apply in your authority, including ensuring the policies you set and the practices you apply for managing risk are consistent with these principles. As well as being consistent with the guiding principles, the Strategy also identifies actions under each measure, so it will be important to read and understand the Strategy as a whole.

- **Managing flood risk** – Using the objectives and measures in the National Strategy to guide you, consider what your main objectives and measures will be for managing flood risk. You should use your assessment of risk to determine the actions to be taken under the local strategy. A range of appropriate measures to manage the probability and consequence of flooding can be used over different timescales.

- **Working together to protect people and property** – The National Strategy sets out the need for community involvement in decision making. As the Act allows flexibility and options for joint arrangements, this could include any local circumstances where responsibilities are shared or an alternative authority is carrying out the work on your behalf (for example an IDB). In particular, though, it will be important to show how local communities are being involved in developing the Local Strategy

- **Reporting on and reviewing the strategy** - the Environment Agency has a role in reporting about flood and coastal risk management, including the application of the National Strategy. It is expected that LLFAs will provide information on development and implementation of local strategies to inform reporting to Government. It is also expected that the national understanding of risk will be developed and maintained through the provision of local information to the Environment Agency. What mechanisms will you put in place for review and reporting?

6 Flood Risk Management Authorities

Managing local flood risk is the responsibility of the LLFA. The Local Flood Risk Management Strategy must set out who the risk management authorities are in the area and what their relevant functions are. An LLFA must consult the public and affected risk management authorities about its strategy.

The risk management authorities described below are named by the Act

The **Environment Agency** is an executive, non-departmental public body responsible to the Secretary of State for Environment, food and rural affairs. Its principal aims are to protect and improve the environment, and to promote sustainable development.

Lead local flood authority in relation to an area in England means

- the unitary authority for the area; or
- if there is no unitary authority, the county council for the area.

Unitary authority means

- the council of a county for which there are no district councils
- the council of a district in an area for which there is no county council
- the council of a London borough
- the Common Council of the City of London
- the Council of the Isles of Scilly

District Council means

A district council for an area for which there is no unitary authority

Internal drainage board (IDBs) has the same meaning as in section 1 of the Land Drainage Act 1991. Drainage boards were set up in areas of special drainage need to sustain both agricultural and developed land use. The principal function of drainage boards is to manage water levels in their areas to minimise flood risk and supply water (irrigation) to people, property and land. Boards have a duty to “exercise a general supervision over matters relating to the drainage of land” in their areas.

IDB membership includes elected members representing the occupiers of the land in the district and members nominated by local authorities to represent other interests which naturally invites and supports the localism agenda.

Local authorities may wish to consider widening the role of IDBs in their area where a business case can be made for this showing the costs and benefits to local communities. Local communities who do not receive central government funding because of the limited financial impact of flooding in their area may consider proposing a new IDB.

Water Company means a company which holds:

- an appointment under Chapter 1 of Part 2 of the Water Industry Act 1991, or
- a licence under Chapter 1A of Part 2 of that Act.

Water and Sewerage Companies are required to have regard to Local Strategies, and they have responsibilities for drainage of certain areas as set out in Section 94 of the Water Industry Act 1991.

Highway Authority has the meaning given by section 1 of the Highways Act 1980. Broadly, the Minister responsible for Transport is the highway authority for motorways and trunk roads. Outside of Greater London, the county council or Unitary Authority (or metropolitan district) is the highway authority for all highways in the county. London boroughs (or the Common Council) are the highway authority for all highways in the boroughs in the City, and Transport for London is the highway authority for all Greater London Authority roads. It is therefore commonly the case that the lead local flood authority also has the highway authority responsibility.

English risk management authorities are required to act in a manner consistent with the national flood and coastal erosion risk management strategy. These risk management authorities must also, with the exception of water companies, act consistently with relevant local flood risk management strategies in carrying out their flood risk management functions.

Other groups or organisations with a role in flood risk management

Whilst the above risk management authorities are specifically referred to in the Flood and Water Management Act, it is essential to recognise the key contribution of other internal and external authorities and stakeholders that have a key responsibility for flood risk management in their own areas of discipline.

Therefore, when the LLFA considers which partners to engage in the development of the local strategy beyond those formally listed as RMAs in the Act, this could include a wide range of bodies, some of which are listed below.

'Internal' partners might include:

- Civil Contingencies Unit
- Strategic/Forward Planning
- Property Services
- Bridges and Structures
- Highways Planning Liaison (Highways Development Control)
- Countryside and Coast Team
- Development Engineering (Infrastructure, Supervision and Audit, Road Records and Licensing)
- County Farms
- Engineering Programme Management (including Local Transport Plan, Safety Engineering, Programming and Implementation)
- Public Rights of Way
- Parks, Amenity and Street Care
- Car parks

- Local Planning Authorities
- Information Services
- Communications, community engagement and public relations
- Sustainability and climate change teams
- Environmental services

'External' partners might include:

- Highways Agency
- National Park Authorities and Royal Parks
- Network Rail
- Emergency services
- Parish and Town Councils
- Housing Associations
- Local Resilience Forum
- Coastal Groups
- British Waterways
- Natural England
- English Heritage
- Met Office
- Local partnerships, forums and community groups
- Association of British Insurers
- Wildlife Trusts
- Royal Society for the Protection of Birds
- Association of Drainage Authorities
- National Flood Forum
- Country Land and Business Association
- National Farmers Union
- Professional Institutions
- Land owners and land/estate managers
- Universities

Developers have a vital role to play in delivering the outcomes of risk management strategy. Planning authorities should take necessary regard of not just the statutory planning framework and the National FCERM Strategy, but also the Local Flood Risk Management Strategy. The Local Strategy should be considered as supplementary planning guidance (SPG) and therefore form a material consideration in the planning process. In so doing, future developments will take proper regard of the local flood risk management strategy including the risk of flooding from surface water, groundwater and ordinary watercourses. Information on principally coastal and fluvial flooding may be found in the Strategic Flood Risk Assessment, although some also seek to address surface water flood risk.

Regional Flood and Coastal Committees have been established to take forward much of the work previously carried out by Regional Flood Defence Committees (RFDCs), with an extended remit to include coastal erosion. They will play an important local role in guiding the Environment Agency's flood and coastal activities, approving programmes of work for their areas and continuing to raise local levies under existing arrangements to fund local priorities. It is intended that they will also have a wider role in assisting the

review of local authority risk assessments, maps and plans required by the Flood Risk Regulations.

What you need to consider for your local strategy....

- The LLFA must ensure the risk management authorities and other stakeholder organisations for an area are identified and listed within the Local Strategy
- Make sure they know they are a risk management authority!
- Work in partnership with them to maximise opportunities to manage risk, co-operate and ensure they take part in shaping Local Strategy priorities and objectives
- Consider establishing arrangements with other risk management authorities for how arrangements for carrying out S19 investigations will work.

7 Flood and coastal erosion risk management

The local flood risk management strategy must set out who the risk management authorities are in the area and their relevant functions. This is intended to clarify where the flood and coastal risk management roles and responsibilities sit within an area. Mindful of the differing local authority administrative boundaries, it is not possible within this framework to be prescriptive on how this might be achieved, and each lead local flood authority will need to take its own view on this dependent on local circumstances. It is imperative as part of the governance and successful delivery of services that all risk management authorities are aware of and take responsibility for the functions they exercise.

The National Flood and Coastal Erosion Risk Management Strategy for England sets out three levels for roles and responsibilities for flood risk management. These are

- policy and the strategic overview of flood and coastal erosion risk management
- planning risk management
- implementing risk management measures

Risk management functions

The lead responsibilities for planning flood and coastal erosion risk management functions are as follows:

- Environment Agency
  - flooding from main rivers, the sea and reservoirs including coastal erosion risk management

- Lead Local Flood Authorities
  - flooding from surface runoff, groundwater and ordinary watercourses

- District councils and Unitaries
  - coastal erosion risks (together with the Environment Agency)
  - planning flood risk management activities in partnership with lead local flood authorities
  - making decisions on development as a local planning authority

- Utility and infrastructure providers
  - planning the future development and maintenance of services
  - taking account of FCERM plans in their own planning process
  - ensuring their assets and systems are resilient to flood and coastal risks
  - ensuring the required level of service can be maintained in the event of a flood incident

Implementing risk management measures

The lead responsibilities for implementing risk management measures are as follows

- Environment Agency
  - risk-based management of flood risk from main rivers and the sea
  - regulation of the safety of reservoirs with a storage capacity greater than 25,000m3 (once the relevant parts of the Act have been commenced, reservoirs with a capacity of 10,000 m3). It should be noted that responsibility for carrying out work to manage reservoir safety lies with the reservoir owner/operator

- Lead Local Flood Authorities and District Councils
  - reducing the risk of flooding from surface runoff, groundwater and ordinary watercourses (may arrange for this work to be carried out on their behalf by other organisations, for example District Council, IDBs, etc)
  - duty under the Act to investigate flood incidents to help understand how they happened, their impacts, and actions that may be taken to reduce future risk

- District Councils and Unitary Authorities
  - land use planning and working with communities to ensure that development is appropriate for the area (supported by the Environment Agency and other organisations such as infrastructure and utility providers)
  - works on sea flooding and coastal erosion
  - powers to protect land against coastal erosion
  - control third party activities on the coast (including the construction of private defences or the removal of beach material)
  - emergency planning and especially in flood recovery (supported by the Environment Agency and the Met Office by providing warnings of flooding from rivers and the sea in England)

- Water and sewerage companies
  - managing the risks of flooding from water supply, surface and foul or combined sewer systems
  - working with developers and landowners to reduce the amount of rainfall entering sewers through the use of SuDS
  - effectual drainage responsibility

- Highways authorities
  - providing and managing highway drainage and roadside ditches under the Highways Act 1980

- Riparian owners and Landowners
  - common law duty to maintain ditches to prevent them causing a nuisance to road users

Local authorities are experienced in managing multi-service and multi-agency functions. However, factors that achieve successful outcomes are dispersed between the risk management authorities. As a consequence, it is essential that effective partnership arrangements are in place between all risk management authorities and other involved stakeholder organisations to ensure a well co-ordinated approach to flood risk management activities.

What you need to consider for your local strategy....

- LLFAs will need to consider the functions required in legislation and seek to translate them into aims, objectives and outcomes in the Local Strategy;
- The legal functions and more general capabilities of Flood Risk Management Authorities in your area should be thought through prior to the specific roles within the Strategy being decided;
- It is worth remembering that, with the exception of responsibility for the Local Strategy, LLFA authority functions can be delegated to other agencies with mutual agreement. It should be made clear in the Local Strategy where a LLFA does this.

8 Assessment of local flood risk

The PFRA is an initial assessment of flood risk required under the Flood Risk Regulations which transpose the EC Floods Directive into UK law. PFRAs were completed by each LLFA by the statutory deadline of 22nd June 2011. Areas identified as at significant risk will be subject to the next stages of the Regulations and LLFAs will be required to produce hazard and risk maps and flood risk management plans. The PFRA should be used to inform the Local Strategy, identifying the areas potentially at risk of flooding and the assessment of that risk should be used to decide what further actions might be required including whether a surface water management plan or flood risk assessment is required.

A surface water management plan or flood risk assessment is site specific and will usually focus on a small area or catchment to assess the risk within that area and identify possible mitigation or resilience measures that are required to reduce the risk or consequence of flood events. This should also feed into local flood plans or resilience groups to enable the suitable planning of emergency procedures.

How PFRA should be used as a starting point, baseline assessment of risk

The PFRA should be used to collect and collate information on historic floods, localised flooding incidents and also areas of potential (future) flood risk. Information on historic floods is likely to be held by any flood authority such as County, Unitary, District or parish councils, the water companies and the Environment Agency. The LLFA is required to investigate (where it deems necessary) and record flooding incidents within its area including information on which authorities have a flood risk responsibility for each incident. This could be arranged to complement the PFRA and vice versa.

To assist with the assessment of flood risk, the Environment Agency has developed a series of modeled surface water flood maps, available from its on-line Datashare, that can be used for this purpose. Flood risk authorities may also have modeling information for particular areas or studies and these should be identified and collated as part of this process.

Climate Change

When looking at flood risk management, it is essential to consider the potential impacts of climate change because, given the nature of flood mitigation works, any solutions put into place should be designed for the longer term and be resilient to a changing climate.

To help LLFAs the Environment Agency has commissioned work to consider the impacts of climate change on sources of local flood risk for each River Basin District across England and Wales. UKCIP09 also contains projections for individual river basins, which LLFAs may already be using.

The first phase of this work has provided text for use in Preliminary Flood Risk Assessments to comply with section 12 (6)(h) of the Flood Risk Regulations 2009. The information will provide a summary of the latest science and implications for climate change applicable to local flood risk. The second phase will provide information to help incorporate climate change into the development of Local Flood Risk Management Strategies. The project will provide a starting point for further risk assessment and option

planning for LLFAs. Guidance documents are already in existence that can aid the assessment of climate change and these include the Environment Agency's Flood and Coastal Erosion Risk Management Appraisal Guidance (FCERM-AG), Planning Policy Statement 25 – (PPS25) and others which are listed within FCERM-AG.

Specific information on climate change factors to use for flood risk assessments are also available. This provides a simple starting point for flood risk assessment and climate change and is used both in FCERM-AG and PPS25. Although published in 2006, the values are consistent with Government's latest climate change projections, UKCP09.

What is significant risk, intervention levels, levels of service?

Significant risk has a specific meaning under the Flood Risk Regulations which is to be used when determining flood risk areas for the Preliminary Flood Risk Assessment. Defra has set the thresholds for this current cycle around the consequences of harm to people. Therefore the indicative flood risk areas are where there is the highest concentration of people at risk of surface water flooding and where it is most appropriate to prepare maps and plans for flood risk management in the first cycle.

However, at a local level lead local flood authorities will need to make their own assessments of the levels of risk for which they consider some form of management is necessary. Intervention levels and the level of service, or flood risk protection can then be determined.

LLFAs will need to establish a methodology for prioritising allocation of resources. This will need to have local credibility, and will need to balance the historical experience of flooding against the levels of future flood risk that can be projected from the Environment Agency's surface water flood risk maps.

Other criteria will play an important role at the local level, depending on the characteristics of the area. However, it is important to consider that the ability to access national funding for surface water management means that potential schemes must be capable of being put forwards according to an existing national set of assessment criteria. This is on itself may provide a framework within which more localised prioritisation criteria can be developed as appropriate for a locality.

What you need to consider for your local strategy....

- Identify available datasets and agree which information is the most suitable considering items such as age of data or suitability for geographical area (i.e. valleys or flat areas). The Environment Agency provide guidance on this for their information and this forms part of each dataset received through the EA geostore

- Agree on a consistent method for data analysis and assessment i.e. property counts. The South West Flood Risk Managers Group (representing 16 lead local authorities across the South West) has agreed a common measure for data analysis to ensure the ability for comparison

- Identify how risk is to be assessed, how it is to be prioritised (such as high/med/low), and the levels of risk for which some form of management is required. This will determine high risk areas which could be considered for individual surface water management plans or other measures, as well as other areas and neighbourhoods that may need attention.

- Assess climate change impact and agree a consistent % increase for drainage / flood mitigation works

9 Objectives for managing local flood risk

The Local Strategy must set objectives for managing local flood risk. An objective is defined as an outcome or target to be achieved. In the context of a Local Strategy, there are likely to be a set of high level strategic objectives as well as a series of more detailed objectives. Objectives for Local Strategies should be consistent with the strategic objectives and guiding principles set out in the National Strategy.

Initial scoping of the Local Strategy will be essential in ensuring that objectives are relevant to the area and proportionate to the risks. Because the legislative requirements in the Act are limited, LLFAs and partners will need to decide how comprehensive or otherwise their Strategies will be. For this reason careful consideration of the scope of the Local Strategy will be very important to ensure that all aspects of the Local Strategy from high level objectives to the technical details of any associated action plans and funding strategies are tailored to the needs of the local area and local communities.

Managing flood risk requires a proactive, pragmatic approach to understanding between all partners, with consistent and meaningful engagement with the public. Partnership working and engagement of local communities will be essential for developing and pursuing objectives that are commonly understood and accepted (see sections 15 and 17). One or more of the Local Strategy's objectives may therefore be about communicating with the public to set realistic expectations and outcomes with regard to managing local flood risk.

One approach to setting high level objectives could be by considering social, economic and environmental indicators within the lead local flood authority. For example, 'reducing risk to life' would be a social objective, and 'reducing economic damage to properties' an economic objective. Environmental objectives could relate to supporting implementation of the Water Framework Directive (for example through improving the naturalness of channels/water bodies), or particular environmental features within the lead local flood authority's area.

More detailed objectives may differentiate between short, medium and long term aims. For example short term objectives may be about getting the working framework right, such as the improvement of co-operation between partner agencies and the agreement of how the strategy and also the broader elements of the Flood and Water Management Act are to be delivered locally. This could be done via the setting up of local flood groups. Medium and longer term objectives might then focus more on the physical outcomes that are being pursued, for instance through specifying more detail on targets for reducing risks to life or economic damage.

The Preliminary Flood Risk Assessment under the Flood Risk Regulations will help provide a baseline understanding of local flood risk within a lead local flood authority. This assessment may help determine more detailed objectives, and will also be important when deciding upon measures and options (see section below). It will be important to review objectives as understanding of risk increases to ensure they are still appropriate.

What you need to consider for your local strategy....

- Scoping the Local Strategy to ensure it meets local needs and is proportionate to the risk
- How can the strategic aims and objectives set out in the National Strategy be translated into a set of specific, meaningful objectives for your local strategy?
- Understand the local risks (including any effect on these from other sources) – use the PFRA findings and set objectives to manage them
- Prioritising the risks – consider both the frequency and consequence of flooding when prioritising. Generally higher risks would be managed first although quick wins may be possible on lower risks
- How will you engage the community and other partners in setting objectives, and how will you manage their expectations?
- How do the objectives in your local strategy fit with the corporate priorities within your lead local flood authority?

Measures to deliver flood risk management

Each LLFA will need to choose measures based upon its locally determined strategy objectives. Measures are defined as activities which will be undertaken to manage risk and achieve the agreed objectives.

The range of possible measures

A wide range of measures should be considered for the short, medium and longer term and should include structural and non-structural approaches. Measures which will achieve multiple benefits, such as water quality, biodiversity and amenity benefits are encouraged and should be promoted where possible. Indeed, the implementation of the Water Framework Directive will make this a significant consideration, and underpins the prominence of SuDS in the primary legislation.

Measures can be considered under a number of high level themes including

- studies, assessments and plans
- development planning and adaptation
- flood awareness, response and recovery
- land management
- asset management and maintenance

It is important to assess and understand risk in order to be able to manage it appropriately. An example of a measure under the studies, assessments and plans theme would be develop a greater understanding of local flood risk. This could be pursued in a particular area where such additional information was identified as being desirable through the baseline provided in the PFRA. It could be achieved through producing a SWMP or other study (assuming the area in question is not a Flood Risk Area under the Regulations, for which additional maps and plans would be prepared anyway). This would then inform technical options (e.g. structural measures) for managing the risk.

Use of existing policies, plans and strategies

It will be important to make use of existing policies, plans and strategies in identifying measures. Strategic studies such as Catchment Flood Management Plans and Shoreline Management Plans should be used to help determine measures as they set the strategic context for overall flood and coastal erosion risk management at catchment and coastal cell levels. Completed SWMP Action Plans will contain an agreed list of actions for specific locations, which can also be incorporated into local strategies. If a Flood Risk Area has been identified under the Flood Risk Regulations, the measures identified in the Flood Risk Management Plan must be included in the local strategy.

Structural measures

Structural measures to manage local flood risk could include activities such as changing land management practices to reduce surface runoff and diffuse pollution, attenuating rainfall at source, designing drainage systems for exceedance, considering the management of rainfall on highways, kerb realignment to manage overland flow paths through the use of SuDS and maintenance activities on drains and gulleys. Hard engineering also remains a valid option and indeed will be an element of many SuDS.

Identifying the contribution that SuDS can make in managing surface water early in the planning development phase is crucial and will help produce its maximum potential, as well as contributing to achieving wider environmental objectives and sustainable development. This can include the exploration of using recreational and agricultural land as flood storage areas and using natural remedies wherever possible and in doing so improve amenities through urban biodiversity. More broadly, identifying areas of coastal erosion and flood risk in the Local Strategy, coupled with good communication with planning authorities, will help to avoid inappropriate development in flood risk areas.

Non-structural

Non-structural measures could include activities such as emergency planning, spatial planning policies to reduce flood risk on new developments and determining overarching approaches for regulating ordinary watercourses (for example through a policy on consents for culverting).

A number of the Coastal Pathfinder pilot projects explored ways of launching and managing awareness-raising campaigns about coastal flood risk, and these could be a useful source for considering wider campaigns covering inland areas as well as the coast. Awareness-raising is a fundamental part of engaging and involving local communities, especially where there is no recent experience of a flood event.

LLFAs have a significant role to play in coordinating partner risk management authorities build awareness of flood risk within the community, assisting in ongoing community engagement as part of identifying measures and outlining the scope of plans affecting specific communities. This will also help to manage public expectations regarding capacity and potential to manage existing and future flooding.

LLFAs should forge links with emergency planning officers at county and district level to improve cooperation and avoid duplication of initiatives such as the formation of flood action groups and co-ordinating volunteer flood wardens. The formation of flood action

groups at a local level will improve the support available to communities and aid the speed of recovery following any flood incidents

Defra's Surface Water Management Plan technical guidance (Chapter 8) contains some useful information on identifying measures and options for managing risk, and could also be used to help determine measures for a local strategy.

What you need to consider for your local strategy....

- A wide range of measures should be considered that best manage the risk in your area in the short, medium and longer term.
- Use the data gathered on past & future floods for the preliminary flood risk assessment including the locally agreed surface water information.
- Consider the need to develop your understanding of risks further through data collection, modelling or risk monitoring
- Consider land management practices & SuDS to reduce surface runoff and diffuse pollution
- Consider collaborative measures with other risk management authorities
- How can identified flood risks best be managed among the various flood risk management authorities in the area based upon their responsibilities and capabilities?
- What are the other established priorities for the area and how do they support or conflict with flood risk management priorities?
- What is affordable and realistic and what is not?
- Cross-boundary working – how will you work with neighbouring authorities within the catchment/coastal cell?
- Which of the different types of measures, and what specific measures, will best apply to the different objectives specified in the strategy.
- Improve communications at a local level & form action groups

10 Flood Risk Management Funding

Funding is an important part of the Local Strategy, sitting alongside setting of priorities and establishing the objectives and measures needed to achieve them. This will include establishing the costs and benefits of individual proposed projects and consideration of local contributions and beneficiaries where appropriate.

The Local Flood Risk Management Strategy is intended to secure the most feasible flood risk management solutions for the locality, on a risk-based analysis of cost-benefit. Depending on the scope of the Local Strategy this may be limited to managing local flood risk only, or it may extend to flood risk from all sources across the LLFA's whole area. As a result, the prioritisation process may differ to some extent from that followed in preparing Surface Water Management Plans, which are often carried out at a city or town scale level. Nonetheless, the basic principles of cost/benefit analysis as covered by Chapter 9 of the Surface Water Management Plan Guidance document can be applied.

When considering schemes to deliver the Local Strategy, LLFAs should be mindful of works proposed or being carried out by other agencies in the area, particularly flood risk management authorities. There may be opportunities to deliver schemes jointly with partners both within the LLFA area, and with neighbouring LLFAs. These should be explored, particularly given that at the Regional Flood and Coastal Committee level neighbouring LLFAs will agree regional priorities with one another and with the Environment Agency.

While it is vital that authorities consider local priorities and funding conditions when developing and appraising options for schemes, Defra has established a general policy (flood and coastal resilience partnership funding) which sets the ground rules for determining national funding contributions for flood and coastal erosion management schemes. Surface water schemes are now eligible to access this funding source, alongside fluvial, tidal and coastal erosion schemes. LLFAs, therefore, will need to consider how they assess specific flood risks locally if they wish to bid for national funding to support local flood risk schemes.

Defra's policy position is set out in more detail with reference to the following documents:

- Defra's "Appraisal of flood and coastal erosion risk management" policy statement
- the Environment Agency's "Flood and Coastal Erosion Risk Management Appraisal Guidance"

The first document emphasises the following principles when considering the benefits of a scheme:

- Consideration given to 'risk management' and 'adaptation', as opposed to only 'protection' and 'defence';
- Consistent and transparent planning with value for money in mind, in a way that complies with the Treasury guidance on appraisal and evaluation in Central Government (The Green Book);
- Helping to achieve better social and environmental outcomes as part of sustainable development, both by considering a broader range of issues and by using a broader range of analysis techniques; and

- Adopting a risk-based approach, whilst considering impacts within the whole of a catchment or shoreline process area.

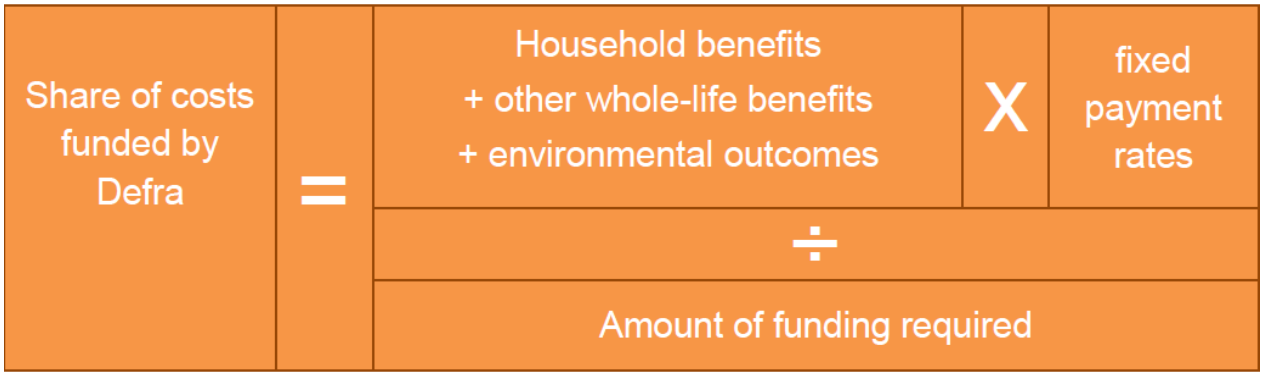
Capital Funding

Following consultation from December 2010 to February 2011, Defra has introduced a new approach to allocating national capital funding, known as the Flood and Coastal Resilience Partnership Funding. It is based on cost/benefit analysis which emphasises the importance of making accurate assessments of future savings arising from flood risk management schemes. The philosophy behind the change is a movement from "meeting costs" to "paying for outcomes". (http://archive.defra.gov.uk/environment/flooding/funding/documents/flood-coastal-resilience-intro-guide.pdf)

The key difference will be the replacement of 100% funding for schemes that are successful in the national funding bid, to a situation where national funding will more usually only meet a proportion of overall scheme costs, although some will continue to attract full funding.

This means that more schemes will be eligible for some national funding, including surface water schemes and property level protection. However it also means that fewer will be funded 100% from national funds, and cost savings as well as more local contributions will need to be found to attract national funding. It is very important, therefore, that LLFAs consider carefully the balance between meeting local need, and the extent to which local resources can be made available to top-up national funds. This is particularly important where LLFAs have to balance the requirements of maintaining and providing coastal and fluvial defences with those of managing inland, local flooding.

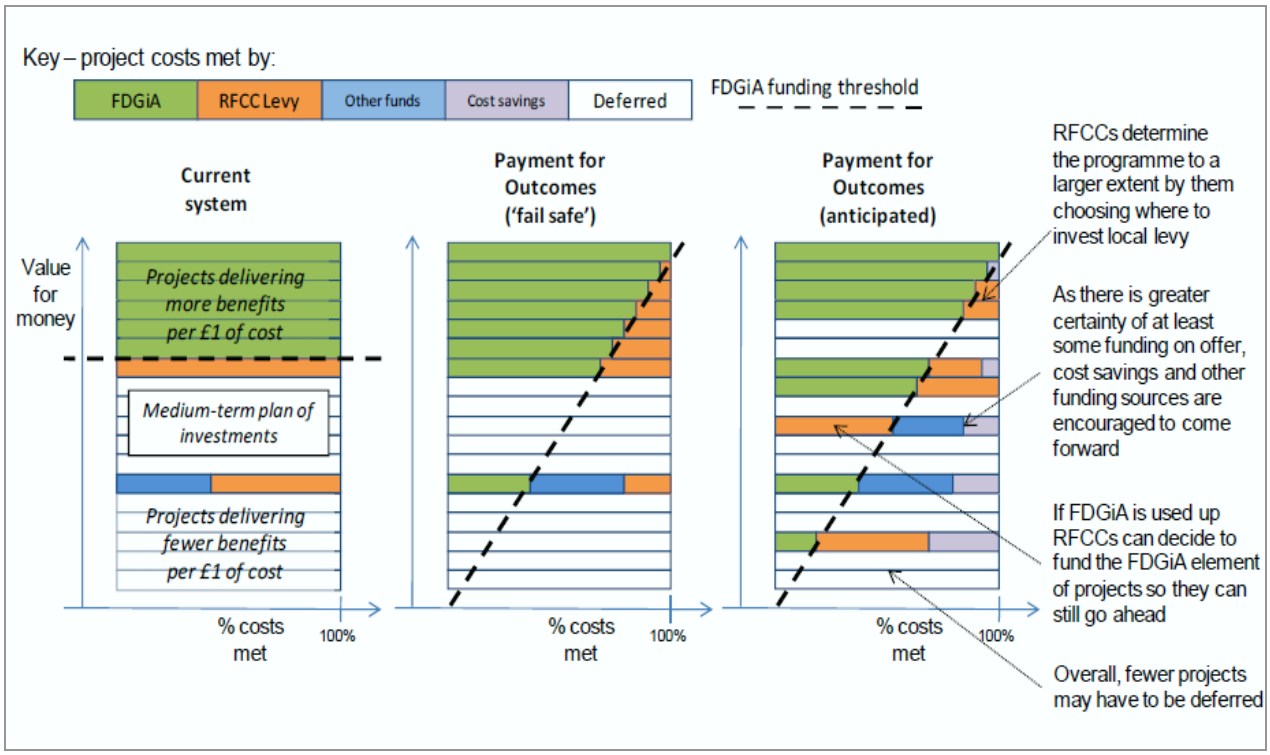
In the new system, a calculation can be made for any scheme which will state how much of the funding will be provided by FDGiA (Flood Defence Grant in Aid). This will see funding levels for each scheme linked directly to benefits, in terms of the number of households protected, the damages being prevented plus other scheme benefits such as environmental benefits, amenity improvement, agricultural productivity and benefits to business. In addition to these elements, payment rates for protecting households in deprived areas will be higher so that schemes in these areas are more likely to be fully funded by the Government[1] The means of calculating the amount provided by FDGiA is shown in the following diagram:



[1] For further information on how levels of deprivation will be assessed, refer to the Index of Multiple Depravation commissioned by the Department for Communities and Local Government (www.imd.communities.gov.uk)

The organisation that put forward the scheme will then be expected to either drive down costs so that the grant covers the cost of the scheme or find local sources to fill the funding gap. The final decision on allocation of FDGiA and Local Levy funding will be made by the Regional Flood and Coastal Committees.

In 2011-12 the indicative allocation threshold for contributions required to attract FDGiA was 120%. For example, if it is calculated that FDGiA will cover 80% of the costs of a scheme, local funding will need to produce 40% of the funding to guarantee that it will be put onto the Medium Term Plan. If it is only possible to provide 20% then it is still possible it will be put forward but it cannot be guaranteed. The purpose of this is to encourage as much funding as possible to come through local sources as the more local funding is provided, the greater number of projects can be delivered.



Revenue Funding

The funding for development, application, maintenance and monitoring of the strategy is supplied through non-ringfenced DCLG Local Services Support Grant (LGGS) originating from Defra. In the current financial climate, with strong competition from other, more established service areas, LLFAs may need to make a strong business case locally to secure sufficient LGGS to deliver their statutory obligations, as well as developing the political and managerial support to ensure that flood risk management attracts the appropriate priority level for the local area. The Local Strategy will provide the evidence base for this in many cases, as it should encapsulate the programme that local partners want and hope to be able to deliver over the lifetime of the strategy.

The Local Strategy, and the actions it may lead to, is not necessarily for the lead local flood authority to pay for alone. In developing local strategies in partnership, opportunities need to be explored with other local partners to realise mutual benefits. Local Strategies should consider the direct FCERM benefits and those that are enabled

by the FCERM action alongside the costs of risk management works, and look for contributions towards costs from those that stand to benefit the most. In doing so, the strategy does not need to be constrained by the amount available to the LLFA alone.

In addition to LSSG, formula grant will continue to support ongoing flood and coastal risk management responsibilities undertaken by local authorities. These include land drainage (where undertaken by local authorities), maintenance of ordinary watercourses and coastal defences, and payments of levies to the Environment Agency ('local levy') and internal drainage boards ('special levy'). Around £100 million is expected to be spent on these items across all Local Authorities in 2011/12.

These activities and the resources dedicated to them should be detailed in the local strategy. Doing so may highlight efficiencies and scope for better prioritisation and co-ordination of activity amongst partners, and better use of each others' skills and capabilities as well as resources. Improved linkages between organisations' investment and maintenance regimes provide opportunities in this regard.

Formula grant is not ring fenced, so local authorities do not know exactly how much it will receive for a single service within the Environmental Protection and Cultural Services sub block of grant, although the totals are calculated according to a formula that takes into account previous years' expenditure. This includes the amounts paid out by Local Authorities in Local Levy.

In effect, each local authority has complete discretion about which priorities to fund. It is worth recognising this flexibility in preparing a business case, and again, to draw from the programme you have outlined either within or as part of developing and agreeing the local strategy.

The outturn returns collected by DCLG each year indicate that local authorities were investing nearly £30 million each year in additional schemes through the Regional Flood Defence Committees' local levy, although levy is not only used to fund schemes. However, to date they have only been able to spend their money on schemes to prevent coastal and fluvial flooding. Under the Act and the creation of Regional Flood and Coastal Committees they will in future be able to also spend it on coastal erosion projects and surface water flooding.

Local Funding

Local authorities and communities have a number of options available to them to help pay for local schemes that do not meet national priorities but nevertheless deliver significant benefits to local communities. Such local funding mechanisms could range from the use of existing local authority prudential borrowing and wellbeing powers, the business improvement district (BID) model or increases in council tax precepts, where these are acceptable to Councils and local people, affordable and in the best interests of local communities.

Other new and alternative, funding sources are potentially available from a range of organisations and beneficiaries. These include

- Section 106 agreements (s106), local tariffs, supplementary planning documents and any future community infrastructure levy (CIL), subject to its introduction

- Local business rates including 'business rate supplements' and council taxes including specific precepts and 'special expenses', plus fees and charges, where appropriate and affordable

- Local activities that can achieve flooding and coastal erosion benefits as a secondary outcome to their primary purpose of securing community benefit and facilitating economic growth and sustainability

These activities would include those associated with the local environment, land management, highways management, community infrastructure management, recreation, tourism, wealth creation and regeneration plans.

Prioritising schemes in terms of some of the cost/benefit principles set out in Government guidance documents will increase the chances of being funded, but there may be local sources of funding that can be considered. Potential commitments to alternative sources of funding can be explored with partners and local communities and businesses during development of the Local Strategy.

The Local Government Association have produced a document *Securing alternative sources of funding for flood and coastal erosion risk management*. (http://www.lga.gov.uk/lga/aio/19270971) This provides information about the new funding mechanism and identifies potential partners to work with on raising money. It also lists potential sources of funding, for which it provides a brief overview of the advantages and disadvantages and suggestions of when it would be suitable. Finally there are case studies of successful collaborations which have delivered projects.

Case Studies

Peopleton in Worcestershire helped to fund its own flood defences in 2010. The village was severely affected in 2007 where flooding saw 45 homes inundated in the village. The project involved the digging of a ditch, the installation of a road culvert and the laying of huge pipes beneath the village's surrounding fields, a process which had estimated costs of £150,000.

The funding was found through a mixture of revenues raised from the parish council/local residents (£25,000), a Government loan (£50,000) and contributions from both the district council and the county council.

Bradford Metropolitan Council was part of the successful FloodResilienCity and the Eden Rivers Trust was part of the ALFA consortium. Essex County Council is currently lead partner on a bid including Chelmsford Borough Council and Chichester District Council. This is for a three year project involving local authorities in France and Belgium to allow greater learning and co-operation across borders. It will allow a major piece of work on the River Chelmer which will enable land to be opened up to development.

National Funding

Department of Environment, Food and Rural Affairs (Defra)

- Defra expects to spend more than £2.1 billion on FCERM over the next four years
- This is approximately 8% less than was spent by Defra over the previous four years (an average £590m a year). It also marks a steeper drop of 21% from the amount spent 2010-11. These savings will be partly offset through efficiencies in delivery and procurement, better risk-based prioritisation and hopefully through greater private contributions
- The £2.1 billion consists of roughly £1bn capital (approximately £261m per year) and around £1.1bn resource (includes 'programme' spend such as maintenance, flood forecasting, and incident response; and administration)
- Defra has stated that it remains committed to fully funding local authority new burdens under the Flood and Water Management Act. It has confirmed funding support through LSSG for LLFAs (£21 million in 2011/12, and £36 million a year thereafter, which reflects the phasing-in of the Flood and Water Management Act 2010)

Department for Communities and Local Government (CLG)

On top of the £2.1bn from Defra, local authorities will be spending money supported by formula grant from the Department for Communities and Local Government. This is expected to be around £100m this year, based on indications from the outturn returns collated by CLG from local authorities.

European Union

European Union funding is available through the Interreg scheme, an European Community initiative aiming to stimulate interregional cooperation in the European Union. It started in 1989, and is financed under the European Regional Development Fund (ERDF). The current programme is Interreg IV, covering the period 2007–2013. These schemes encourage local authorities in countries through North West Europe to join together and share information and practices. Match funding is available for specific local projects.

What you need to consider for your local strategy....

- A Local Flood Risk Management Strategy must reflect local priorities at least as much as those set out in national guidance
- Be aware of schemes in your area proposed or considered by other agencies and how they impact upon your plans
- Identify and isolate "quick wins" – small scale schemes that will be easy to carry out and do not require a cost/benefit analysis
- For all other schemes you need to pursue, consider them in light of:
  - The PFRA and other local flood risk assessment, such as a SWMP
  - The new prioritisation set out in the Government's Partnership and Resilience Fund
  - Clear prioritisation criteria for maintenance, new works and day-to-day LLAF activities that are appropriate for the local area
- The Local Strategy should state which forms of funding are being considered by the lead local flood authority
- It will also help to identify any further actions that will be needed to be taken by the lead local flood authority (or other risk management authorities) to ensure that the new funding alternatives can take place
- Schemes that require collection of money from local residents would require resource and particular skill-sets, and changes to business rates or a levy would require political decisions to be agreed

11 Reviewing the strategy

It is up to the LLFA to decide on how frequently it feels it needs to review its strategy. It will be dependent on a number of factors such as the level of risk, the types of measures being delivered and other initiatives which may influence the strategy.

Possible considerations

A possible framework for refreshing the Strategy is provided by the Flood Risk Regulations / EU Floods Directive. The PFRA will need to be reviewed once every six years and local authorities should be prepared for the potential need to considerably review the strategy as a result. In lead local flood authority areas where national Flood Risk Areas have been submitted to the European Commission, the timetable for producing flood hazard and flood risk maps and flood risk management plans will also provide a structured timetable by which to reconsider the strategy.

However, the strategy should be considered a living document. If areas are identified as being at risk of flooding, solutions will need to be developed appropriate to local priorities and resources. The level of flood risk in terms of its frequency and impact will help determine the priority for managing these risks – a risk based approach. These solutions will inform the review of the Local Strategy, and as they are developed the strategy will need updating.

Implementation of schemes will reflect upon further development of the Local Strategy, and flooding events themselves may necessitate review, including changing the prioritisation of works and a reappraisal of the risks the local area faces.

Authorities might bear in mind that as further responsibilities become incumbent upon them, their own activities may require updates to the strategy. The development of the Register and Record of features affecting flood risk, and the findings of any investigations carried out under Section 19 of the Act might result in information and findings that need to be written into the flood risk assessments and the Local Strategy itself.

Equally, the approval of large SuDS drainage schemes might prompt the LLFA to reconsider elements of its Strategy. It is down to the authority to decide how regularly the Strategy should be updated in this light.

What you need to consider for your local strategy....

- Develop a general framework for updating the strategy based upon major milestones, such as those provided by the Flood Risk Regulations
- Consider other factors that might make it necessary to update the strategy such as those outlined above, and as far as possible write these into your timetable for updating the strategy
- In light of these, decide how up-to-date you want your strategy to be
- Consider how you might easily and regularly update the strategy, for instance by posting it on easily amended web pages

12 Wider environmental objectives and Strategic Environmental Assessment

To ensure that the strategy contributes to the achievement of wider environmental objectives it is important that it meets the requirements of the Strategic Environmental Assessment (SEA) directive and the Water Framework Directive (WFD).

The objective of the SEA directive is “to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.” It requires certain plans and programmes to have an environmental assessment, know in the UK as an SEA.

European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment” (the Strategic Environmental Assessment (SEA) Directive) was transposed into domestic legislation by the Environmental Assessment of Plans and Programmes Regulations (2004) on 12 July 2004 in Wales and 20 July 2004 in England.

SEA is an iterative process which involves the systematic and publicly accountable evaluation of the potential significant environmental impacts of a strategy and its individual policies. Its main objectives are to integrate environmental considerations within policy development at the earliest opportunity and to provide an “audit” trail of option development and environmental mitigation made to demonstrate that the strategy has, as far as is practicable, met environmental concerns.

SEA is not the same as a project based Environmental Impact Assessment. It is a high level strategic exercise which can only be undertaken at a comparatively coarse level. In many instances it would be either a disproportionate use of resources or indeed impossible to secure the level of detail which will give certainty in identifying detailed and precise environmental effects.

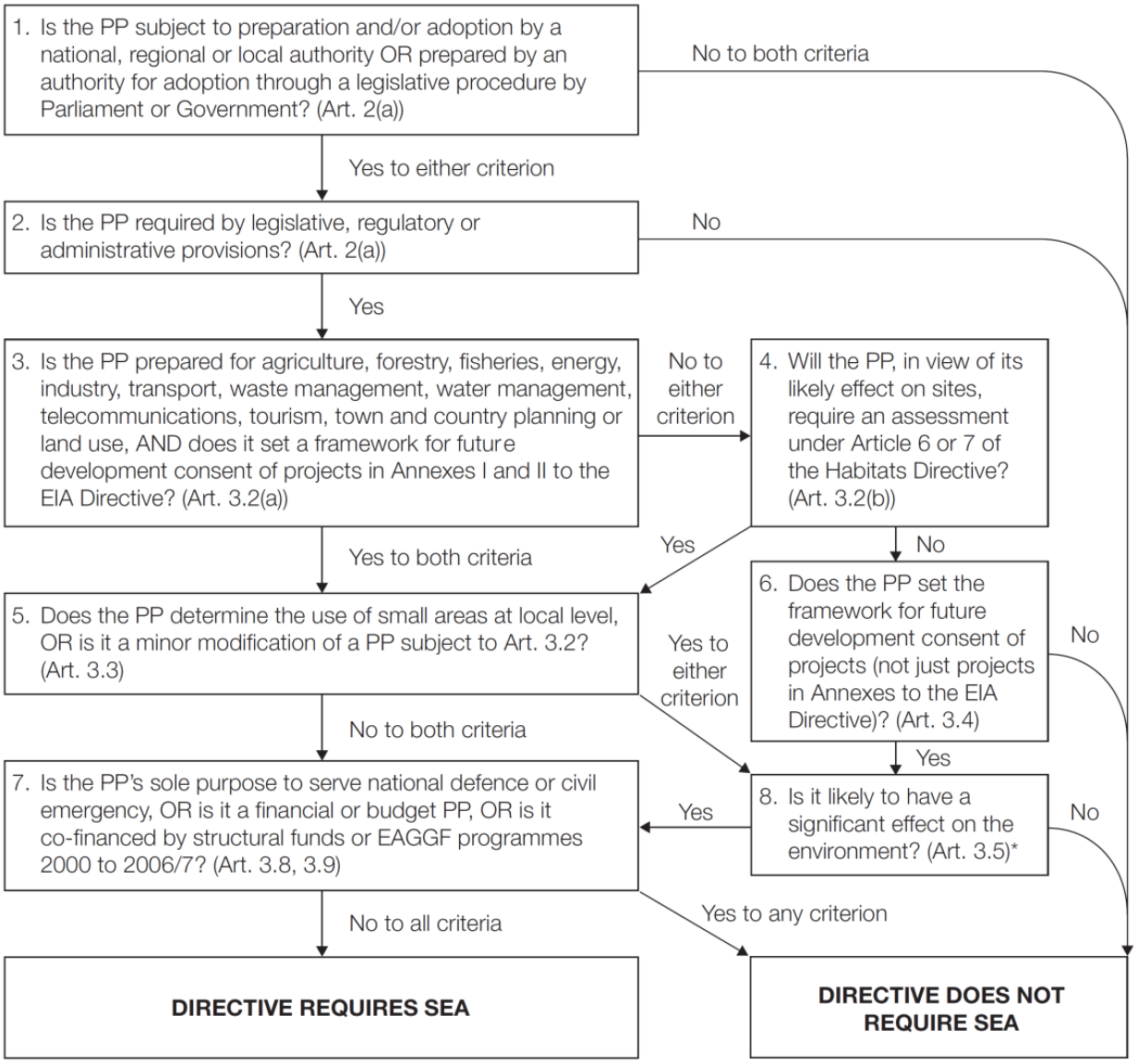
Is SEA necessary?

The Local FRM Strategy is likely to require statutory SEA, but this requirement is something the LLFA must consider: there is a useful decision route included within the DCLG Practice Guide to help. If the LLFA is uncertain it should draw on appropriate legal advice since this decision is critical.

Within the Practice Guide a flow diagram sets out the key questions which need to be answered to determine the need for SEA. The diagram is reproduced below.

Figure 2 – **Application of the SEA Directive to plans and programmes**

This diagram is intended as a guide to the criteria for application of the Directive to plans and programmes (PPs). It has no legal status.



*The Directive requires Member States to determine whether plans or programmes in this category are likely to have significant environmental effects. These determinations may be made on a case by case basis and/or by specifying types of plan or programme.

It is a statutory duty to undertake a Habitats Regulations Assessment (HRA), and it is recommended that prior to strategy development the matter is discussed with the authority's ecologist or Natural England. The Local Flood Risk Management Strategy is a statutory document, and it is for LLFAs to determine locally the need for SEA and the scope of any assessment work that is carried.

If the HRA determines that the Local Flood Risk Management Strategy would give rise to significant environmental effects on a European site designated for its biodiversity value (Special Protection Area, Special Area of Conservation, candidate Special Area of Conservation or Ramsar site) SEA will be necessary, as well as a full HRA.

A summary of the SEA Process

Rather than using the term Strategic Environmental Assessment, the Directive defines "environmental assessment" as a procedure comprising

- Preparing an Environmental Report on the likely significant effects of the draft plan or programme
- Carrying out consultation of the draft plan or programme and accompanying report
- Taking into account the Environmental report and the results of consultation in decision-making; and
- Providing information when the plan or programme is adopted and showing how the results of the environmental assessment have been taken into account.

The focus of effort will be on stage one, preparing the environmental report, which can be broken down into the following broad areas of activity.

Setting context and objectives, establishing the baseline and deciding on the scope

- Scoping of relevant plans and programmes to establish what external factors should be considered in the process, to identify key environmental issues and to assist in developing the objectives or criteria against which performance will be judged
- Collecting and establishing baseline information to develop an understanding of key local environmental issues, assist in the development of objectives and assist in the prediction of environmental effects.
- Developing SEA objectives against which performance will be judged
- Consult on the scope of the SEA with statutory environmental bodies.

Developing and refining alternatives

- Assessment of the Strategy's objectives to ensure consistency and identify potential alternatives
- Assessment of the Strategy's objectives and policies performance against the SEA objectives
- Introduce mitigation measures where adverse environmental impacts are identified.

Following the preparation of the Environmental Report, it will be placed on consultation with the draft Strategy. Comments will be received on both, and any significant amendments made in light of comments received will need to be assessed. The final report will then be published alongside the adopted Strategy.

Examples of best practice and further guidance

All local authorities will have experience of SEA or Sustainability Appraisal (the socio economic and environmental assessment of development plans introduced by the Planning and Compulsory Purchase Act (2004)) either in terms of undertaking the process in house or managing a consultancy delivering the project. In addition to Local Development Frameworks, Local Transport Plans will have been subject to SEA as will have the Environment Agency's Catchment Flood Management Plans and Shoreline Management Plans. As a result there is a great deal of local information available for the preparatory stages of reporting on baseline conditions and developing an appraisal framework

Further reading

Local government already has a considerable amount of experience with this environmental tool, and all SAs and SEAs are in the public domain and published on each authority's website. These will provide good practical examples of the process, supported by a non technical summary.

A Practical Guide to the Strategic Environmental Assessment Directive provides the most recent expression of government advice on undertaking SEA and can be accessed on

www.communities.gov.uk/publications/planningandbuilding/practicalguidesea

The 2004 Regulations can be viewed here
http://www.legislation.gov.uk/uksi/2004/1633/introduction/made?view=plain

The European Commission SEA page can be viewed here

http://ec.europa.eu/environment/eia/sea-legalcontext.htm

Stages in the HRA process

It is important to be aware that the phrase Appropriate Assessment (AA) is often used to refer to the whole process. Appropriate Assessment is actually one stage in the HRA process.

Stage one: screening stage: This identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage two: Appropriate Assessment (AA): It considers whether the impacts of a plan or project are assessed against the conservation objectives of a European Site, in order to identify whether there are likely to be any adverse effects on site integrity and site features.

Stage three: Assessment of alternative solutions: Where significant negative effects are identified at the AA stage alternative options should be examined to avoid any potential damaging effects to the integrity of the Natura 2000 Site.

Stage four: Assessment where adverse impacts remain: An assessment of compensatory measures where, in the light of an assessment of Imperative Reasons of Overriding Public Interest (IROPI), it is deemed that the project or plan should proceed. In this case Government must be consulted and the Secretary of State for Communities and Local Government will inform the European Commission about the compensatory measures adopted.

Meeting other statutory requirements

The Flood and Water Management Act requires the Local Strategy to specify how it contributes to the achievement of wider environmental objectives (para 9 (4) (i)). Undertaking an SEA provides an opportunity to clearly fulfil this requirement of legislation.

Furthermore, the Natural Environment and Rural Communities Act (2006) imposes a duty on all public bodies to have regard to biodiversity when carrying out their functions (the biodiversity duty). SEA and the subsequent environmental report can be used to demonstrate compliance with the requirements of this legislation.

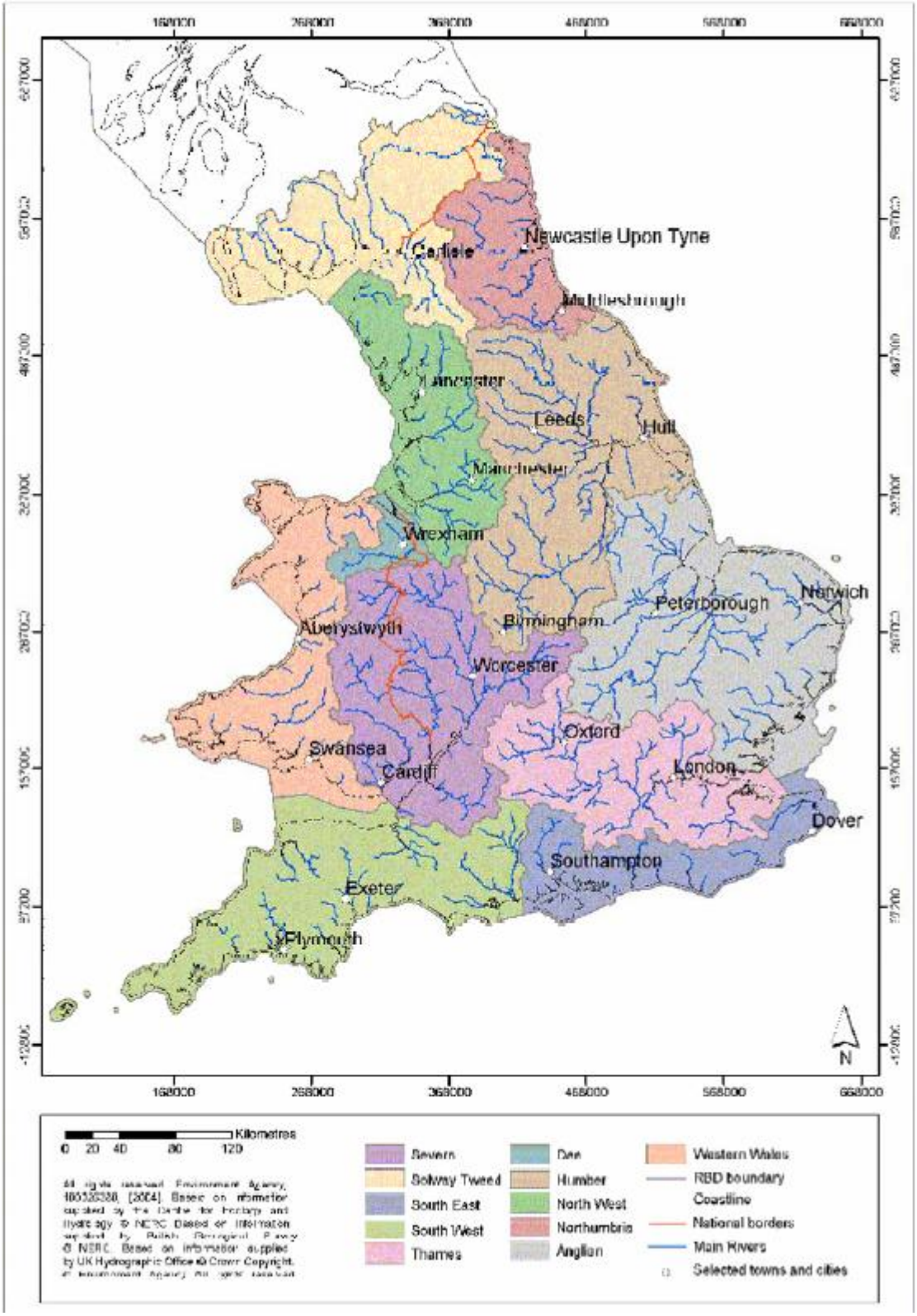
A further consideration may be internal reporting requirements; for example, an authority may be accredited with an environmental management standard such as EMAS or ISO 14001 which would require an assessment of all policies and plans to maintain and improve the authority's environmental performance.

Whether the LLFA is a signatory to the Nottingham Declaration or has a Climate Change Adaptation Strategy has a bearing on the need for an SEA of the LFRMS. SEA provides an established and tested method of assessing environmental and climate related factors to policy development.

The Water Framework Directive is to help protect and enhance the quality of surface freshwater (including lakes, streams and rivers), groundwaters and dependent ecosystems, estuaries and coastal waters. Therefore it covers the water involved in both local flood risk and coastal and fluvial flood risk.

The Environment Agency is a competent authority responsible for overseeing this work. In that role it has created River Basin Management Plans for the 11 river basin districts of England and Wales which set environmental objectives for each body of water and provide summaries of programmes of measures. The plans are being carried out between 2009-2012 and will be reviewed between 2012-2015. Local Strategies will need to have regard to the River Basin Management Plans for the area and ensure that the actions put forward in the Local Strategy do not impede their programme of works, but help to deliver the actions and measures identified within them.

The map below shows how the River Basins are divided in England and Wales. It may be sensible to have a brief summary of the River Basin Plans in the strategy as well as a link to them. The plans can be found here: http://www.environment-agency.gov.uk/research/planning/33106.aspx


Newcastle Upon Tyne
Carlisle
Middlesbrough
Lancaster
Leeds
Hull
Manchester
Wrexham
Norwich
Peterborough
Aberystwyth
Birmingham
Worcester
Oxford
Swansea
Cardiff
London
Dover
Southampton
Exeter
Plymouth
N
Kilometres
0 20 40 80 120
Severn
Solway Tweed
South East
South West
Thames
Dee
Humber
North West
Northumbria
Anglian
Western Wales
RBD boundary
Coastline
National borders
Main Rivers
Selected towns and cities

What you need to consider for your local strategy....

- Given that the SEA Directive requires an “environmental assessment” of certain plans and programmes, it will be necessary for your authority to consider the preparation of an environmental report alongside the Local Strategy
- Consider the extent and implications of sustainable development
- Consider how the River Basin Management Plans interact with the Local Strategy
- Confirm with you local Natural England team, whether any significant habitat sites will be affected by your proposed strategy.

13 Local partnerships and governance

Effective joint working between risk management authorities is fundamental to delivering the obligations on risk management authorities under the Flood Risk Regulations 2009 and the Flood and Water Management Act 2010.

Most LLFAs have established partnership arrangements. Some of the earlier ones developed in anticipation of the legislation are outlined below, and represent a range of possible options that have been developed. While there are many features common to all, there are also significant differences, reflecting the unique circumstances of each area.

The case studies are intended to provide initial ideas as the basis for bespoke local solutions. In some cases it may be possible to replicate a model in another area with minor modifications to suit local requirements. Other areas may need a wholly new approach. We hope that the range of models provided covers a sufficient variety of types of area and authority to be useful in either circumstance.

Partnership creation and development

Local Authorities have a great deal of experience of developing and managing partnerships, ranging from area-based Local Strategic Partnerships through to service-focused groupings such as Local Children's Partnerships and Community Safety Partnerships. When developing the initial scoping it is strongly suggested that officers speak to others who have already delivered successful strategies within local authorities to share best practice.

There is extensive literature in this area, and much of the experience of Local Authorities over recent years is distilled on the LGA website. New Defra guidance provides a resource of background information about potential flood management partners so that LLFAs can have a better understanding of these and how collaboration and joint funding opportunities can be maximised.

The basic steps in putting a partnership together tend to be fairly generic. Taking a range of case studies and experiences, the main principles can be summarised as follows.

Purpose

It is essential to the success of a partnership that all parties involved should be clear about what they are trying to achieve from the start, individually and collectively. In the case of flood risk management the overall agenda is set by the National FCERM Strategy for England and the wider legislation.

An assessment of the implications of the legislation for all risk management authorities will help develop an understanding of the benefits to each organisation, the outcomes that are required, the necessary resources to achieve them, and the specific contributions and roles of each of the partner authorities. Guidance on specific aspects of the legislation will be forthcoming from Defra and the Environment Agency as sections of the Act are commenced.

Stakeholders and 'buy-in'

In many respects the structure and operational practices of the partnership, including governance and decision-making arrangements, will follow from defining its purpose. This includes identifying which organisations need to be involved. The Act provides a starting point in defining Risk Management Authorities, but engagement with other stakeholders, not least with local communities and local elected members, will be a key factor in establishing support for developing and implementing the partnership.

The mix of these 'core' partners varies across the country. Internal Drainage Boards only occur in low-lying areas which are defined as areas of special drainage needs, such as the Fens, East Yorkshire or the Somerset Levels, while areas with dense populations will tend to have Unitary rather than two or three-tier local government.

Beyond these organisations there are a range of potential stakeholders who could be brought into the development of the partnership. British Waterways is not named in the Act as a risk management authority, but maintains a network of canals across the country, which in some areas is extensive. There are also opportunities for engaging with parish councils and with community groups, for example by working with them on a specific project such as the public consultation phase of developing the Local Strategy. At the same time there are opportunities for developing joint working with regionally based bodies, particularly Natural England, and with existing strategic groups such as the Coastal Groups and the LRFs.

A key principle running throughout the Pitt Review was the need for better communication with the public. This was a fundamental reason for recommending the establishment of an LLFA with responsibility for co-ordination and leadership at a local level, and for a single body with oversight nationally (the Environment Agency). The consistent message emerging from the Pitt Review and from Government since 2007 is that better co-ordination and leadership by the public sector must be accompanied by greater public resilience and participation in identifying and managing flood risk for themselves.

LLFAs will need to work with and communicate with the public about their own role, but their capacity to do this will be strengthened if engagement is integrated with a wider partnership approach. Every risk management authority has a range of existing channels for engaging and communicating with its communities, but the opportunity presented by closer partnership working is to develop a joint strategy for communicating and engaging, as well as making links between communications channels so that advice to the public is consistent, and does not involve several different points of contact.

In addition, the support of elected members and senior managers in all risk management authorities cannot be underestimated. The involvement and support of elected members will be essential in allowing risk management authorities to implement Local Flood Risk Management Strategies, and hence to take a proactive stance rather than reacting to problems as they arise. Local priorities may include managing flood risk, particularly if an area has recently experienced flooding, but other localities may consider it less significant. This will present challenges in securing the necessary support to develop new partnership arrangements, and it is important that any proposed approach is developed in a way that is seen to be proportionate to the risk in the local area.

Managing and governing partnerships

Most of the existing flood risk management partnerships established to date have been developed by building on previously established arrangements, often at a local level, to deliver practical solutions to incidents of flooding where individual authorities do not have the capacity or the resources to provide solutions alone.

Further details of these arrangements can be found in the case studies presented below, but in general terms a common arrangement is for local delivery groups to focus on co-ordinating partners' efforts on the ground, with a more strategic group managing area-wide initiatives such as the PFRA or SWMP, where appropriate.

There are variations on this theme, with a more 'regional' approach taken in the Yorkshire and Humber region along RFCC boundaries, or with a more locally based grouping as in Lincolnshire, chaired by the Environment Agency to manage the linkages between national and local strategies, and to facilitate two-way dialogue between the LLFA and the national overview authority.

In all these cases there are clear terms of reference for roles and responsibilities of each of the groupings within the partnership. If possible, it is helpful to ensure that these include the accountabilities for each group, including the links from the partnership into the decision-making and accountability framework for each participating organisation. This can take the form of ensuring that each organisation's formal scheme of delegation includes its involvement in a particular partnership, or a statement in the partnership terms of reference defining the role of an organisation's representative on a particular group, and the extent of the representative's authority on behalf of their organisation.

Provision of secretariat and resources to ensure that a partnership functions effectively is a matter for local discretion. Most local authorities have a great deal of experience in running multi-agency partnerships such as LSPs on limited resources and within existing capacity. Flood risk management is a rather different area, requiring the involvement of different levels of expertise such as engineering and risk management professionals to ensure effective delivery of joint projects or services.

However, the essential skills required for partnership management are more generic, provided that the partnership manager or support officers have, or are provided with, sufficient understanding of the roles and functions of the risk management authorities in question. This will include a sufficient grasp of the relevant legislation and the strategic and policy context to support the partnership in setting and achieving the right objectives and outcomes

These objectives and outcomes are the glue that hold the partnership together, providing the main rationale for the partner organisations to work together, and the agreed plans shaping their commitment to deliver services together, and therefore differently from the way they would work as individual authorities working alone. The Local Flood Risk Management Strategy will be the key document for any flood risk management partnership, as it will define the aims, objectives and outcomes for all contributing partners within the locality. It will also act as a key point of reference for all stakeholders as a jointly agreed strategy, completed in consultation with the public.

Communications

The need to engage and communicate with partners and the community has been referenced on several occasions above. This is particularly important given the new requirement to publish the PFRA and subsequent risk management plans, placing a premium on the ability to provide consistent, accurate information on behalf of all parties to the local partnership.

A single, shared narrative underpinning a partnership communications strategy can assist in this, and many areas have found considerable benefits in establishing a web portal where partners and the public can access a shared set of information, although sensitive data will require more secure handling.

Review and performance management

Regular review is important to ensure not only that agreed objectives and outcomes are being met, but that the partnership itself remains fit for purpose to deliver them, and to continue revising and setting new objectives into the future. Many authorities will have established means of undertaking such reviews, ranging from a partnership 'health check' to a thorough on-going review of all aspects of the partnership and its operations.

In terms of performance management, the National Flood and Coastal Erosion Risk Management Strategy and the Local Flood Risk Management Strategy will set the core outcomes and targets for partners to achieve, and the Local Strategy will also need to act as a focal point for integrating the outcomes agreed in Shoreline Management Plans, Catchment Flood Management Plans and Surface Water Management Plans (where these exist) into a coherent whole.

Case Studies

Case studies of partnerships from around the country were published by the IDeA in 2009 in advance of the then Flood and Water Management Bill being presented to Parliament.

Many Authorities have their own well-established procedures for setting up and developing partnerships. Examples include the following:

Flooding Case Studies

Department for Education and Skills Guidance

Guidance produced by Rochford District Council
Rochford District Council Partnership Guidance

Working across administrative boundaries

The new legislation presents LLFAs with real challenges to work across administrative boundaries. While LLFA boundaries have been selected for the management of surface water and for implementing local leadership and co-ordination, main rivers, the coast and land drainage is managed on the basis of river catchments and sub-catchments, and coastal cells.

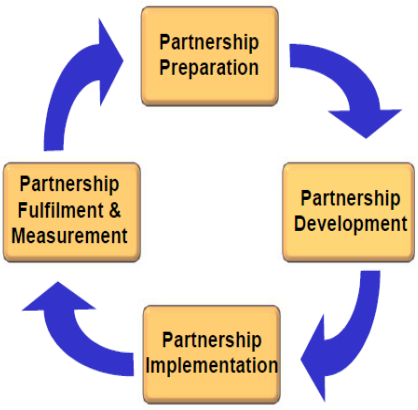
This means that most LLFAs will be working with partner authorities in catchments whose boundaries extend beyond their own, or cut across their own. It is all the more important that Local Strategies align with those of neighbouring authorities, while continuing to focus on local priorities and circumstances.

In practical terms LLFAs will need to consider how to accommodate elements such as the asset register and the requirement to share information with partners such as Water Companies and the Environment Agency, whose boundaries may cover numerous complete and partial LLFA areas. One way forward might be a common data-sharing protocol between a Water Company and several LLFAs, while the asset register could be developed as a signposting system to link to existing databases.

There are a number of examples of mechanisms for cross-boundary co-operation, including the Humber and Yorkshire Learning Alliance and the East Area LLFA Network. The National Strategy makes references to the potential for RFCCs to assist in making links between LLFAs, although this would entail a rather different way of working, given that not all LLFAs will necessarily be directly represented on RFCCs under the new arrangements. There will also remain a need for LLFAs to develop means of liaising across Environment Agency regions, where the local area is split between more than one RFCC.

Summary

The key stages in developing and managing partnership arrangements can be summarised on the basis of a partnership lifecycle approach.



Lifecycle	Summary
Preparation	Developing a clear picture of what partnerships your organisation needs, what they will deliver and who you will work with
Development	The process of findng and engaging with potential partners, sharing ideas and reaching a joint agreement
Implementation	Building on the agreeement reached and putting in place the structures and process to make the partnership work, building towards the launch
Fulfilment & Measurement	Delivering the promise. Working together to achive the benefits agreed in the Development phase and taking opportunities to achieve more

Figure 4 (Taken from Lincolnshire County Council Partnering Framework: a step-by-step guide to developing collaborative partnerships (Bridge, 2006), Introduction, p. 10).

What you need to consider for your local strategy....

Alongside this, the experience of a range of LLFAs in establishing their partnership arrangements highlight a number of key considerations:

- Is the need for and purpose of the partnership clear?
- Are the right stakeholders and partners identified (including 'internal' LLFA partners and elected member representatives on RFCCs)?
- Is there agreement on the form and function of the partnership?
- Is there political and senior managerial backing for the partnership?
- Does the partnership command the resources required to deliver its remit?
- Is there an agreed shared narrative that can support a joint communications strategy?
- Are governance arrangements sufficiently robust to provide democratic accountability and transparency?
- Does the partnership have mechanisms for communicating effectively with the public, and for receiving and acting on information from the public?
- Does the partnership make best use of existing arrangements and resources that are already known to be delivering effectively?
- Does the partnership facilitate effective linkages between operational activity and strategic and policy decisions?
- Does the partnership have an agreed mechanism for prioritising use of resources, whether through pooled funding, or in co-ordinating use of individual partners' resources (in most cases this will be provided by the Local Flood Risk Management Strategy)?

14 The role of Scrutiny and Overview Committees

The Flood and Water Management Act requires LLFAs to ensure that adequate scrutiny arrangements are put in place, including arrangements to review and scrutinise the exercise by risk management authorities of flood risk management functions or coastal erosion risk management functions which may affect the local authority's area.

Risk management authorities must comply with a request made by an overview and scrutiny committee for information and/or a response to a report, and must have regard to reports and recommendations of an overview and scrutiny committee. In effect, the Act extends Local Authority scrutiny to cover the full range of flood risk management activities carried out within the local authority area.

Current support available
The LGA has published a scrutiny of flooding toolkit, which may help Overview and Scrutiny Committees set objectives and lines of enquiry. Further information will also be available soon on the LGA website.

Case Studies of Scrutiny and Overview in action

There are several examples of scrutiny exercises undertaken in recent years which may also provide helpful guidance to LLFAs considering this aspect of flood risk management.

A good example is Hampshire County Council's Environment and Transportation Select Committee from November 2009. The scrutiny report is available online at the Centre for Public Scrutiny (CfPS). Although a 'one-off' review, the final report includes recommendations for ongoing scrutiny of specific areas by the Council's Policy and Resources Select Committee.

After the 2007 floods Worcestershire County and District Councils established a Joint Scrutiny Task Group, whose final report includes recommendations for all agencies responsible for flood risk management.

Gloucestershire County Council conducted an extensive scrutiny exercise, resulting in a final scrutiny report. This, together with a schedule of witnesses and a range of related information can be found on the website, focusing on flooding at Longlevens, which the Scrutiny Committee took as a case study.

Lincolnshire County Council has established formal scrutiny arrangements, extending its existing Environment Scrutiny Committee to become a Flood Risk and Drainage Management Scrutiny Committee. This involves co-opting a scrutiny member from each of the seven districts in the county, with the participation of invitees from Internal Drainage Boards, the Environment Agency and Water Companies.

What you need to consider for your local strategy....

Although experiences will vary greatly across the country, there are a number of fundamental considerations which lead local flood authorities may wish to take into account when developing their new scrutiny functions:

- What existing expertise exists among elected members in the locality?
- Have there been previous scrutiny exercises on a task and finish select committee approach that could provide a local model?
- Can an existing committee undertake the role, or is an entirely new grouping required?
- Does the area wish to focus on specific priorities, or to take a broad overview of the whole range of water management activities?
- In two-tier areas the opportunity exists to establish joint committees of County and District Councillors, but localities may also wish to consider inviting non-voting representation from other risk management authorities, such as the EA, IDBs and Water Companies, that fall within the remit of the Committee's scrutiny powers; and
- How can the scrutiny process be developed as a two-way dialogue between committee members and risk management authorities, such that the expertise and knowledge of Members is enhanced and deepened?
- Members should be provided with background briefing material prior to scrutiny meetings;
- Member support can be developed through proactive briefing and workshops, especially in developing an understanding of the roles of different risk management authorities; and
- The rationale for, and scope of the Local Flood Risk Management Strategy needs to be explained clearly, particularly its local relevance in relation to other existing priorities.

15 Communications and engagement

Effective communication is fundamental to promoting better community relations and awareness of flood risk management issues, and encouraging people at risk to take action before and during a flood.

Communities offer a wide range of perspectives and experiences related to flooding that are invaluable in helping create the vision and response for flood risk management. By encouraging wide participation, local authorities can achieve a more complete picture of flood risk and better understand and promote solutions. In return, it is incumbent on all to understand the effects and limitations of flood risk management actions and to act responsibly to help reduce risks to themselves and others.

Ensuring that people are well informed about flood risk management services, and able to enter into productive dialogue on the issue, is crucial to building trust and a strong reputation for local authorities. Communication contributes to service users' satisfaction and their view of an authority's overall performance.

The LGA have provided a resource to help local authorities to improve their communication with communities, staff and other stakeholders. It covers all the key topics on communications and contains advice on best practice and case studies.

Why is communicating flood risk management to a community level so important?

There are some communities that are acutely aware of the importance of flood risk management and have taken action within their own local areas. These communities are typically those that have experienced at first hand the effects of flooding. Engaging with the minority that self-advocate flood risk actions is relatively straight-forward. Engaging beyond this 'small' group to the wider community can be difficult and sometimes daunting.

There will always be the handful of enthusiastic people in any community who are keen to tackle the threat of flooding. However, it is the task of LLFAs to encourage all the others to get involved, share their views and do something! To make real progress in reducing the risk of flooding, communities will need to be involved and collective action will need to be seen as both desirable and normal.

Lead local flood authorities, District Councils and Parish Councils are vitally important in setting the local leadership. In reality, communities are more likely to respond to local leadership by those who share their concerns and interests. The advantage of community leaders is that they have direct access to people, understand local issues and sensitivities and can sustain activity over time. This will inevitably prove a critical success factor for both communications and behaviour change.

Case study

The importance of marketing and communications should not be underestimated by local authorities. Somerset County Council, as an example, has taken the view that a strategy for marketing and communications is one of the core aims of the Strategic Flood Management Partnership. The Partnership consists of senior representatives of each of the risk management authorities in Somerset – see Figure 6. It is worth noting that the Strategic Partnership also has a seat for the Chair of the Somerset Water Management Partnership which is made up of special interest groups, landowners, and other technical and non-technical representatives. This group is used as a consultative forum and provides an invaluable 'test' for local strategy and mechanism to engage with communities in

Figure 6 Somerset County Council – Strategic Flood Management Partnership participants

It should be recognised that a consistent message needs to be conveyed when engaging with communities. Likewise, in setting levels of service and service standards, there is a need for all risk management authorities to 'buy-in' to the overall aims of the Partnership or the lead local flood authority.

The array of marketing and communications tools available to LLFAs is diverse and it will be a decision for each authority to make on how best to engage with the audience and communities depending on the message and resources available to deliver the message. Other departments that have developed successful communication plans can be used as a model for developing something similar for flood risk.

Localism

The Government's localism agenda focuses on giving communities a greater say in local decision making. The National Flood and Coastal Risk Management Strategy recognises that flood risk management authorities will have to work with communities in managing flood risk by focusing "…*on the needs of individuals, communities and businesses, including them in decision making and in the management of risk*". In this context, communities are generally understood as being geographically-based: home-owners and businesses within a particular area.

Working with communities in managing flood risk will help

- understand the needs of individuals, communities and businesses
- make better informed plans, decisions and policies
- communities understand what flood risk means for them, including what they should do in a flood and what they could do to manage risk
- communities recover more quickly after a flood
- meet goals (including timescales)
- increase local support
- increase trust in government
- develop the reputation of LLFAs and other partners
- help manage expectations

The key to success will be the attitude local authorities have and the approach taken in engaging communities. Traditionally, most public organisations made decisions, let people know what they planned to do and then had to defend their decisions to those who didn't like them.

Case Study

In a series of Flood Fair events organised by the Somerset Local Authorities Civil Contingencies Partnership, communities were targeted where there was a known flood risk. Community representatives received demonstrations of the latest flood defence technologies, how to prepare a flood plan and how to be better informed and equipped to deal with the threat and consequences of flooding. These events served to inform residents and businesses of the potential effects of flooding so that they can take appropriate action, such as protecting important documents and other high-value assets.

Community Engagement is conducted in Somerset on a multi-agency level and the activity has taken a top down approach in that elected members have been briefed on Flood Events and Community Resilience. Speakers have been brought in at an appropriate level from the Cabinet Office supported by Senior Police and Fire Service Officers. Senior Council Officers from County and District have attended a Flood Risk Seminar.

Since 2006 there has been a proactive campaign supporting or supported by the Environment Agency (Wessex Area Office at Bridgwater), again this has taken a top down process starting with Community Leaders from Parish Councils and Communities. These have been followed by targeted events for particular communities at risk of flooding in Somerset, particularly rapid rise catchment areas.

"Building Trust with Communities"

The Environment Agency has developed an engagement methodology known as 'Building Trust with Communities'. This approach was launched in 2002 to encourage Environment Agency staff to engage more effectively with local people and organisations. The aim is to help move away from one-way communication (based on an "information deficit" model, which suggests that if only people knew what you do, they

would think the same way too) to two-way dialogue that recognises that local people's views are important and that they have a role in decision making. Whilst this approach was specifically derived for use by the Environment Agency, there are many aspects that are equally applicable to LLFAs.

To encourage more dialogue, a package of support, which includes the building trust step-by-step guide, training courses, learning networks, case studies and 'how to' guides has been developed. More details can be obtained by contacting the Environment Agency's national Stakeholder and Community Relations Team through your Environment Agency Area Office.

The building trust approach recognises that a broader range of approaches is required, especially those which enable others to engage-deliberate-decide (EDD). This involves working with communities early on to understand their concerns, interests and priorities. The leading organisation may still make the final decision, but they will have worked with others, including the communities, in developing the solution. At the very least, communities will understand your role and why decisions have been made.

Rather than jumping straight to an engagement method, the building trust approach asks three key questions to help you decide how to engage with the community in a way that meets your needs, but also meets the needs of the community

- what you want to do?
- why you want to work with the community and why do they want to work with you?
- who do you need to work with?

It is also important to remember that there will be instances where local communities can take more of a leading role for themselves in originating and implementing solutions. This may be more common in situations where property-level resilience measures are an appropriate approach, but it should not be assumed that a risk management authority will be the originator of a solution in all cases.

Case Study
The building trust approach has been used on a range of flood risk issues including, building a new flood defence scheme, deciding to undertake managed realignment or making changes in the way a watercourse is maintained.

Creating community ownership for local brook
Foxholes Spinney and Lubbesthorpe Brook have long been blighted with rubbish dumping. Running along the back of a number of houses, grass cuttings and old fence panels blocked the brook, contributing to local flooding and consequently giving rise to complaints from those affected.

The area needed to be cleared and maintained but also had the potential to be a nature area, benefiting wildlife and the local community. By working with the community in understanding and resolving the issue, a sense of local ownership was created for the brook.

The local Environment Agency team worked in partnership with local authorities, the local Wildlife Trust and the community to improve this area. A partnership group was set up and through letters, newsletters and evening surgeries the community were asked for their concerns about the area and views on how it could be improved. The views of the community and the partnership group were used to write a regeneration plan for the brook that everyone felt they'd contributed to.

Giving communities a voice in managing flood risk

Approximately 70 properties in the Dunhills area of Leeds have been flooded three times in the last five years (2004, 2005 and 2007). Because of the frequency of flood events, the issue has become a high profile problem for Leeds City Council and local MPs. The area has been visited by the Secretary of State for the Environment, the Chief Executive of the Environment Agency and HRH The Duke of Gloucester. The relationship between local residents and the Environment Agency project team was unproductive and as a result, attempts to develop a flood risk strategy for the estate had failed. Residents were frustrated at the lack of progress, and the Environment Agency staff felt hampered by a lack of support and cooperation from residents.

In 2009 work started to create a closer working relationship with Dunhills estate residents. The Environment Agency involved residents in their discussions about the options to reduce flood risk in the area. The local communications team helped the project team use the *Building Trust with Communities* approach to plan this engagement work.

Two flood risk management actions have been agreed (heavy maintenance of Wyke Beck in the Dunhills estate and creation of upstream water storage pools). They have the full support of residents that took part in the engagement process, the local MP and ward councillors. The feedback questionnaire conveys a strong sense of ownership of the decisions and an optimism that things are now moving in the right direction.

Why engage communities?
Many examples of engage-deliberate-decide engagement now exist in the EA where local knowledge has helped the Environment Agency understand the flood risk problem, identify potential options to resolve the issues and develop a solution that is locally acceptable.
The building trust approach has also been used in the Thatcham and Leeds SWMPs.

What you need to consider for your local strategy....

The overarching aims and objectives with respect to marketing and communications could be:

- To ensure that communities are fully involved in all aspects of planning for and implementing local flood risk management
- To make sure appropriate key messages and information are developed and deliver them to the right people at the right time and in the right way, allowing opportunities for two-way dialogue
- To ensure communities have enough information to effectively increase their own resilience
- There needs to be a balance between addressing issues of past floods and managing future risks, thus adapting to climate change. The local strategy could weigh this up locally and sell it by providing evidence to the public and elected members and get their buy-in
- Don't forget about all your existing communications channels and the potential for social media and online communities to engage with harder to reach audiences
- To optimise existing communication activities being delivered by partners and to explore opportunities for joint working, or building on existing communications and community engagement activity, thereby securing efficiencies and savings
- To make sure that all audiences have a clear understanding of the key messages, how to access the right information, and how communities can take the necessary precautions before, during and after flood events
- LLFAs may wish to adopt, adapt or borrow from the Environment Agency's bespoke community engagement approach, 'Building Trust with Communities'

16 Civil contingencies and community resilience

Defra is the lead government department for flood emergencies in England. Defra Ministers have overall responsibility for national level flood emergency planning and for ensuring co-ordinated policy and other support, as necessary, to local emergency responders. For more on this, please refer to the National Flood Emergency Framework.

The Civil Contingencies Act 2004 is one of the most relevant pieces of legislation to emergency planning for flooding. It formalises a number of duties on local authorities, the emergency services and other organisations involved (including the Environment Agency) in responding to any emergency. Amongst these are contingency planning and risk assessment for emergencies at the local level, including flooding.

The Act lists local authorities, the Environment Agency, and emergency services as 'Category 1' responders to emergencies. It places duties on these organisations to:

- undertake risk assessments;
- manage business continuity;
- carry out emergency planning;
- share information and cooperate with other responders; and
- warn and advise the public during times of emergency.

Incident management is vital to reducing the consequences of flooding to people. Prompt action to minimise the consequences is the most effective way of limiting the longer term impact the well-being of individuals and the economic resilience of communities.

The Environment Agency has a key role in relation to flooding. It has a responsibility under the Civil Contingencies Act to provide flood warnings to those at risk from flooding from rivers and the sea and permissive powers to maintain and improve flood defences. Work is underway to improve flood warnings for ground water and surface water flooding.

Local resilience forums (LRFs) – of which the Environment Agency is a member in all regions – are responsible for developing multi-agency flood plans (MAFPs). These plans allow all responding parties to work together on an agreed coordinated response to flooding.

LRFs bring together Category 1 and 2 responders within a local police area for the purpose of cooperation in fulfilling their duties under the Civil Contingencies Act. There are also a number of LRF sub-groups that will cover specific subjects such as severe weather and flooding.

While the LRF and associated sub-groups focus on planning for incidents, there are other levels of control that may convene to manage the response during a flood. They are

- Bronze Operational level, at which the management of 'hands-on' work is undertaken at the incident site or impacted areas
- Silver Tactical level of management is introduced to provide overall management of the response
- Gold Strategic decision makers and groups at local level. They establish the framework within which operational and tactical managers work in responding to and recovering from emergencies

This has been further strengthened by the government's commitment to developing a National Flood Emergency Framework (NFEF), which was published by Defra in 2010. The NFEF is a forward-looking policy framework for flood emergency planning and response prompted by Sir Michael Pitt in his report on the summer 2007 floods. It brings together information, guidance and policies and is a resource for those involved in flood emergency planning at local and national levels.

There are a large number of organisations involved in flooding emergencies. These include the Category 1 and 2 responders identified in the Civil Contingencies Act and are likely to expand during the event, depending on the size, duration, and recovery phases. The following lists the key roles and responsibilities for local authorities during and after a flooding emergency

- Coordinate emergency support within their own functions;
- Deal with surface water and groundwater flooding, flooding from 'non main rivers';
- Work with the other Category 1 and 2 responders as part of the multi-agency response to floods;
- Coordinate emergency support from the voluntary sector;
- Liaise with central and regional government departments;
- Liaise with essential service providers;
- Open rest centres;
- Manage the local transport and traffic networks;
- Mobilise trained emergency social workers;
- Provide emergency assistance;
- Deal with environmental health issues, such as contamination and pollution;
- Coordinate the recovery process;
- Manage public health issues;
- Provide advice and management of public health;
- Provide support and advice to individuals; and
- Assist with business continuity.

Further information can be found from the Local Government Improvement and Development web resource.

The Government is keen to promote community resilience, and provides information on how individuals can take responsibility for the protection of their homes and their well being.

Local authorities will continue to lead post-flood recovery within communities. This will draw on and align with Government National Recovery Guidance and advice.

Exercise Watermark

In March 2011 the four day national Exercise Watermark tested civil flood preparedness across England and Wales. The exercise involved surface/fluvial flooding starting in the south west of England, extending into the south Wales, midlands and the Thames valley, followed by tidal inundation on the east coast. A range of 'lessons learned' were identified from the exercise, and a final report will be presented to the Minister for government response. At the same time the Environment Agency report into the lessons learned will be published and the required actions disseminated via Regional Flood and Coastal Committees.

The Local Strategy will need to engage fully with Local Resilience Fora, to ensure that emergency planning is aligned with day-to-day arrangements for management of flood risk, and to maximise opportunities to share data and manage communications. In the long term, the Local Strategy should absorb the lessons learned from emergency incidents, and incorporate them into its approach.

Case study
The Somerset Civil Contingencies Partnership represents all six partners (Borough, County and Districts) fulfilling a statutory duty, which rests equally on County and District Councils under the Civil Contingencies Act 2004. This representation at the LRF ranges from a Corporate Director on the LRF Executive Group, through the Civil Contingencies Unit Manager on the LRF Management Group down to individual officers from the Unit on the various Sub, Working and Task Finishing Groups.

Somerset Local Authorities CCU is the operational unit of the Somerset Local Authorities' Civil Contingencies Partnership tasked to co-ordinate and deliver the duties laid on local authorities' by the Civil Contingencies Act 2004. Its responsibilities in flood response are as follows:

- produce and maintain the Somerset Multi Agency Flood Plan;
- receive and respond to severe weather warnings and flood warnings from the Met Office and Environment Agency;
- when required ensure that the Somerset Multi Agency Flood Plan is activated;
- mobilise the Somerset local authorities' response and co-ordinate the response of the voluntary agency support to flood incidents in Somerset, including recovery;
- promote community resilience within Somerset local communities affected by flooding;
- provide business continuity advice to local businesses that could be at risk from flooding; and
- co-ordinate the provision of mutual aid to other local authorities outside of Somerset affected by flooding.

The CCU lead planning officer for flooding is a member of the Flood Group and there is representation on the Exercise and Training and Warning and Informing Groups, which have work that overlaps the flood area. An officer also sits on the risk assessment group and through the development and review of the Community Risk Register, which sets the work plan for all LRF activity.

An initiative to promote Community Resilience has been the purchase and provision of five small community resilience stores which have or will be sited at historic flood sites. This project has been taken forward with the Civil Contingencies Partnership with support from other Agencies including the EA, Police and Fire Service.

Additionally, there is a requirement as part of the Somerset County Plan 2010 to 2013 as one of the twelve Place Promises Improving help to people at risk of flooding. The requirement is to engage with 15 communities in a year, currently the Unit meets at least double that although not all community engagement is solely about flooding.

What you need to consider for your local strategy...

- Local strategies should recognise the function of civil contingencies and ensure the rescue and recovery activities are managed in line with the local understanding of risk
- The activities of the LRF should not be exclusive of the development of the Local Strategy

17 The role of the Planning Authority

Purpose

The purpose of the planning system is to help achieve sustainable development, ensuring that new development delivers economic, social and environmental benefits. The Flood and Water Management Act makes provision for considerable changes to the role of the LLFA in terms of planning and development control for flood risk management, partly because of the SuDS provisions, but also because the Local Planning Authority must have regard to the Local Strategy in its non-flood risk management functions, and must act consistently when exercising its flood risk functions. Because of this, the role of the Local Planning Authority in flood risk management is essential:

- By planning to avoid inappropriate development in areas at risk of flooding and to direct development away from areas of highest risk. This especially applies to key infrastructure such as hospitals and other major utilities.
- By mitigating the surface water run-off impacts of new development on downstream areas. Planning policies tend to focus on mitigation in terms of adverse impacts from the quantity and rate of run-off. However, given the requirements of the Water Framework Directive, the mitigation of adverse water quality also needs to be considered.

Legislative Context

Under the Flood and Water Management Act**,** LLFAs have a duty to contribute towards the achievement of sustainable development in the exercise of flood or coastal erosion risk management functions and to have regard to Government guidance in this respect. One of the key means of exercising this duty will be through the production of a Local Flood Risk Management Strategy.

This alongside the National Strategy will set out a statutory framework that will help communities, the public sector and other organisations work together to manage flood risk. It will support local decision-making and engagement in flood risk management, making sure that risks are managed in a coordinated way

Collaborative working is critical to ensure that new development is planned to manage the risk of flooding. This can be achieved through ensuring that local plans direct new development to areas with the lowest probability of flooding, and in development management by determining planning applications to ensure decisions are consistent with planning policy. Development also needs to be monitored to ensure that it is built according to the agreed permissions and, if necessary, enforcement action may need to be taken. At present PPS25 provides the principal planning guidance in this area, although this is to be replaced by the National Planning Policy Framework which has recently completed its public consultation.

The legislation also makes County and Unitary Councils the SuDS Approving Body (SAB), with the role of approving all drainage plans and adopting and maintaining SuDS connecting more than one property. The SAB is also responsible for providing approval before connection to the public sewerage system can be made. SuDS consent must be provided before construction can begin where there are drainage implications. This is a

parallel process to planning permission, rather like a consent under the Building Regulations. The SAB will become a statutory consultee to the Local Planning Authority.

In addition, the LLFA has a regulatory role in respect of issuing and enforcing formal Land Drainage Consents for activities on ordinary watercourses outside IDB areas and also for consenting third party activities on "designated structures"; therefore a parallel process to issuing planning permissions is also required here. Once planning has been granted, the precedent has been set and it would be difficult to object to a LDA consent, even on grounds that the work could increase the flood risk. Therefore it is important that the planning application and consent application are not looked at in isolation.

Particularly in two-tier areas, where County Councils are not Local Planning Authorities, this will result in a significant change to their involvement in the planning system, although County Councils are already waste and minerals planning authorities. It is important that the appropriate linkages are made to maximise opportunities for sustainable development and adaptation to climate change in inland and coastal areas; ensuring that the planning process continues to operate to best effect for sustaining local communities, and for planning authorities, infrastructure providers and developers.

This chapter considers the role of the planning authority in Local Flood Risk Management Strategies, under the areas of

- plan-making
- development management and sustainable drainage approval
- enforcement

Flood Risk Management and Local Plans

Local planning authorities in preparing their Local Plans have long since been considering the need to avoid inappropriate development in areas at risk of flooding and to direct development away from areas of highest risk in line with PPS 25 requirements. In order to inform the preparation of Local Plans, most Local Planning Authorities will have prepared Level 1 and 2 Strategic Flood Risk Assessments (SFRAs) for this purpose and to generally guide land use planning decisions. However these SFRAs are based predominantly on data about coastal and fluvial flooding. This is simply because until recently there has been very little reliable data on which to assess surface water flooding. Generally those SFRAs that have taken surface water flooding into account have relied heavily on Water Company DG5 flooding data and recently released Environment Agency's Flood Maps for Surface Water (second generation surface water maps).

PFRAs prepared by LLFAs identify any high level local flood risk in their areas. However, the PFRA uses thresholds of significance for flood risk that are very high in the context of surface water, and many LLFAs may wish to undertake a more detailed assessment of local surface water flood risk than is required in the PFRA guidance.

Surface water flooding is an issue that LLFAs are developing a better evidence base on in order to support the management of flood risk. Surface Water Management Plans (SWMPs) will be produced, where appropriate, by some LLFAs to identify areas vulnerable to surface water flooding and help target resources where they are most needed. An SWMP can be a useful tool for

- assessing the risk of surface water flooding
- identifying options to manage risk to acceptable level
- making the right investment decisions
- planning the delivery of actions to manage flood risk

SWMPs examine existing problems and provide a useful evidence base to inform planning decisions for new development, through identifying specific areas of risk and wetspots, and highlighting areas where there may be development constraints and a need for further detailed investigation. Not only do the SWMPs identify ‘wetspots’ they also identify measures to manage the risk better. A key challenge for local authorities and partners will be securing funding to deliver actions they are responsible for. In the case of new developments, SWMPs are a useful tool in areas of high growth where they can support a ‘masterplan’ approach to development to secure optimal outcomes in terms of:

- flood-risk management
- implementation of SuDS solutions, for example, by securing 'green corridors' or ‘blue corridors’ around watercourses, identifying the best locations for features such as balancing lakes
- utilising the existing natural water environment and subsequent SuDS infrastructure as positive elements in place making and urban design

However, SWMPs tend to be more useful in dealing with specific neighbourhoods, and it is likely that most in most rural areas they will not be the most appropriate methodology.

In the immediate term, strategic policies in local plans will need to take account of PFRAs as well as updated SFRAs, and consider any recommendations from SWMP’s that have been produced. The data gathered for the SFRA, PFRA and SWMP (if one is being developed in your area) can be used to identify areas at risk of flooding to prioritise measures in the Local Strategy. In due course, once developed (by 2013) Local Flood Risk Management Strategies will provide a consistent baseline assessment and outline of key objectives for managing flood risk. The development of the Local Strategy provides an opportunity to link work being done on local flood risk management with SFRAs. These should not be regarded as separate exercises, and can become more integrated and better co-ordinated through delivering the Local Strategy.

Links between the Local Strategy and Local Plan

The Local Flood Risk Management Strategy will form an important evidence base and framework for managing and addressing future flood risk. It draws together the baseline evidence, including historic flooding, existing defences and future changes along with a baseline assessment of flood risk in the area drawn from Surface Water Management Plans (where produced), Catchment Flood Management Plans, Shoreline Management Plans, SFRA's and Preliminary Flood Risk Assessments. This will provide a consistent baseline for managing future flood risk including identifying objectives and measures for addressing this risk.

Importantly, flood management authorities *have a duty to act consistently* with the local and national strategies in respect of exercising their flood risk management functions. Therefore there will be a greater need for LLFAs and Local Planning Authorities (in two tier areas) to work together so that strategic policies in Local Plans align with the Local Flood Risk Management Strategy and are taken into account when deciding on planning applications.

There may also be opportunities to link public consultation on local plans with the development of the Local Strategy, and to ensure that planning and development management policies, and flood risk management policies, are reviewed and revised jointly where appropriate at the same time as consideration is given to other key sustainable development factors. Perhaps more important is the role of the Local Strategy and associated flood risk assessments as part of the evidence base informing the development of planning policy in the longer term.

In terms of long term planning and development strategy, LLFAs and LPAs should ensure that flood risk management relating to all sources becomes an integral aspect of forward thinking, so that strategic policies in Local Plans align with the Local Flood Risk Management Strategy such that land use (and infrastructure) planning, development control and flood risk management become mutually reinforcing elements within a single, overarching approach to spatial planning and development at local and strategic levels. LLFAs and LPAs should also work in partnership with others to ensure that the Local Strategy and Local Plan are aligned with, and developed in conjunction with, related plans in the same area including local and neighbourhood development plans.

Development management and Sustainable Drainage approval

Development management refers to the determination of planning applications, whether for housing, business, schools or other uses.

In Unitary areas the Lead Local Flood Authority is already also the Local Planning Authority, and will determine all planning applications, although ensuring seamless operation between the two functions may still require some attention.

In two-tier areas, Local Planning Authorities will be responsible for determining most planning applications, with County Councils being responsible for determining planning applications related to minerals and waste and their own developments, such as local authority schools, highways schemes and social services. LLFAs will need to work closely with District Councils. LLFAs will need to understand where development pressures are high in flood risk areas and DCs will need to understand the evidence that LFRM strategies are providing to help them formulate future LDFs.

County Councils already work with Local Planning Authorities regularly on highways, minerals and waste matters in their role as highways authority and waste and minerals planning authority. They will need to build on this as they develop their capacity to undertake flood risk management works, to provide enforcement and consenting services on non-IDB ordinary watercourses, and in the SuDS approval process. This engagement will need to be extended so that counties and districts work together to align the strategic policies in the planning authorities' local plans with the LLFAs flood risk management plans.

Availability of resources will be a key issue here and increased volumes of planning applications and related work will need to be carefully assessed. However, this workload

may be eased by adopting a more risk based and proportionate approach, incorporating increased focus on getting strategic policy right which should reduce effort on detailed site by site planning consultations and considerations.

Much of this less strategic activity and detail may be accommodated by developing and adopting the principle of “Standing Advice” to developers I in line with Local Standards where appropriate and other interested parties, along with exploring other techniques and management practices such as outsourcing, or adopting industry best practice .

Sustainable Drainage Systems (SuDS) approval

The provisions of the Flood and Water Management Act 2010 relating to sustainable drainage systems may not be commenced before October 2012. When they are commenced, the SAB will be required to approve drainage plans, before construction can begin, in accordance with new National Standards. There are likely to be exceptions and thresholds for what requires approval initially. The SAB will also be required to adopt and maintain SuDS serving more than one property. Connection to the public sewer system will be conditional on SAB approval of the drainage plans.

What you need to consider for your local strategy...

- SABs and local planning authorities should work together closely to ensure that the planning application and SuDS approval processes operate in a complementary, streamlined and coordinated way so that development is sustainable and decisions are made quickly. It’s important to identify public land that could be used for SuDS alongside any other purposes.
- There will be two SAB approval application routes (either direct to the SAB or by combining the drainage application with a planning application and submitting both to the LPA. In the case of the latter the LPA would forward the drainage application to the SAB for a decision).
- How the SAB function is rolled out
- Options to facilitate closer working between the LLFA, SAB (where different organisations) and development management departments include
    - including planners in existing or newly-established flood risk management partnerships
    - delegating a proportion of the LLFAs workload to district colleagues
    - moving to a more permanent sharing of resource in some form of joint planning authority function
    - using multi-disciplinary working teams
- For significant applications, local planning authorities should consider using a development team approach, involving officers from the LLFA and SAB in discussions about the application, from the earliest pre-application contact, through to the development of the scheme and decision-making
- LLFAs should consider how Local Strategies can be used to prepare standing advice to local planning authorities to help them determine smaller applications.
- LLFAs should consider how the local strategy could provide the evidence for local flood risk standing advice for the SAB
- LLFAs should use the best available information in the Local Strategy, setting policies for issuing Land Drainage Act consents

National Standards for SuDS will set minimum standards which the SAB must use to make its judgement to approve a drainage plan. The draft national standards will be part of the anticipated Defra consultation on implementation of the SuDS provisions in the

Act. Defra will fund maintenance of adopted SuDS approved by the SAB in the short term and are considering the options for funding in the long term.

LLFAs in a number of areas are also likely to consider producing their own 'Local Standards', providing more guidance on local requirements and approach. In some areas local planning authorities may also decide to set local requirements for planning permission that have the effect of more stringent requirements than that of the National Standards.

Publication of National Standards for consultation is currently awaited, together with proposals for a sustainable scheme for funding their maintenance.

SuDS approval will effectively be a parallel process with planning permission, like Building Regulations approval and issuing land drainage consents. The Act provides for the drainage application to be combined with a planning application. A developer will not be able to commence construction until the SAB has approved the drainage plan. There will clearly be a need for effective liaison between the SAB and the Local Planning Authority, where these are different organisations.

Pre-application discussions with developers will be important in ensuring that drainage applications are submitted in full knowledge of SuDS requirements and it will be important that discussions regarding SuDS take place at the earliest possible opportunity. Closer joint working will be required to ensure that SuDS requirements are designed in from the outset.

SuDS are not a new concept but they do require a different way of thinking about how drainage is managed. In addition to managing volumes of water, thus helping to reduce the risk of flooding, SuDS can also improve the quality of water entering watercourses thereby contributing to achieving water quality targets in the Water Framework Directive. SuDS also provide amenity and biodiversity benefits and are adaptable to climate change. The National Standards, when they are published for consultation, will seek to draw these important strands together so that they are given full consideration when drainage plans are considered and approved by the SAB.

What you need to consider for your local strategy...

- Where responsibilities are divided between different authorities, Lead Local Flood Authorities (LLFA) should involve and consult local planning authorities in the preparation of Local Flood Risk Management Strategies (LFRMS) from the earliest stages
- Options to facilitate closer working between the LLFA and strategic planning departments include:
    - including planners in existing or newly-established flood risk management partnerships;
    - delegating a proportion of the LLFAs workload to district colleagues;
    - moving to a more permanent sharing of resource in some form of joint planning authority function; and
    - using multi-disciplinary working teams.
- LLFAs should consider aligning the period of their LFRMSs to a similar timescale as Local plan period, where this is practical
- Opportunities to link public engagement on Core Strategies developing the local strategy should be explored where possible.
- LLFAs should make use of existing evidence (such as Strategic Flood Risk Assessments) prepared for local plans in developing their LFRMS.
- Local planning authorities should involve/consult the LLFA in the preparation of their Local Plans from the earliest stages, drawing on the evidence in LFRMS where this is available.
- LLFAs should consider how the Local Strategy can provide the detail as to why specific areas may not be suitable for development or require certain design criteria to ensure flood risk is not increased and thereby feed that into the local plan. LLFAs must be aware that proposals in local plans are subject to rigorous testing at Examination, and the evidence in the LFRMS must be robust enough to stand up to scrutiny at Examination.
- Consider sharing data/ use of GIS, sharing of data between LLFAs and LPAs related to FRM

The Flood and Water Management Act requires risk management authorities to undertake their responsibilities consistently with sustainable development principles. Effective integration of planning and development policy, flood risk management (including emergency response) and building design approaches will allow resilience to climate change to be ‘built into’ new developments.

Enforcement

The planning application process needs to be supported by a system of enforcement, to ensure that new development has planning permission, that developments are built in accordance with approved plans and that any conditions on an application are met by the developer according to agreed timescales.

In two-tier areas, District Councils are responsible for the enforcement of their areas of decision making (housing, business and other types of development) and County Councils are responsible for the enforcement of County matters (minerals and waste and County Council developments).

The introduction of requirements for SuDS approval also means that new developments need to be subject to assessment of SuDS works, in addition to the monitoring already outlined. There may be cases where the failure to build a development according to the

approved plans has an impact on the agreed SuDS solution, or where unapproved changes to SuDS. In these circumstances, planning and flood and water management officers will need to work closely together to come to an agreed solution, whether through submission of a new planning application or drainage plan, or through enforcement action against the developer to put right any unauthorised works.

What you need to consider for your local strategy...

- Options to facilitate closer working between the LLFA and regulation/enforcement departments include:
  - including planners/highways colleagues in existing or newly-established flood risk management partnerships;
  - delegating a proportion of the LLFAs workload to district colleagues;
  - moving to a more permanent sharing of resource in some form of joint planning authority function; and
  - using multi-disciplinary working teams.

Further information

The LGIU and IDeA (now the LGA) prepared an overview guide for Local Authorities in November 2009, *Flood Risk Management: an introduction and checklist for Local Authorities*

This provides a useful summary overview of some of the key elements of the planning system in relation to flood risk management, including

- embedding Strategic Flood Risk Assessments into the Local Development Framework (LDF)
- avoiding inappropriate development in the functional flood plain
- working with planners in using PPS25 to locate new development and regeneration according to the flood vulnerability of the intended use
- directing development first to risk areas through embedding the PPS25 sequential approach into the LDF
- safeguarding land for critical infrastructure and agricultural use
- developing action plans, where necessary, to support sustainable spatial planning
- ensuring all plans are integrated and firmly linked to strategic policies in local plans
- promoting the use of open space for multiple use/benefits including biodiversity, public amenity and making space for flood water
- assessing and recording the flood risks to existing infrastructure, buildings and services using SFRA
- identifying and mapping communities, infrastructure, buildings and services at greatest risks using SFRA
- retrofitting existing buildings, implementing sustainable urban drainage systems, canalising watercourses, building or improving flood defences
- promoting sustainable water management
- consulting CABE's Sustainable Cities website on planning, management and designing a sustainable place
- Securing funding through development for flood defence schemes

Since the publication of this guidance PFRAs have been completed, and these will be as important as SFRAs in informing spatial planning and development control approaches to flood risk management. See also LGA's website for a range of information on flood risk management and spatial planning.

What you need to consider for your local strategy....

- How the SFRA should be used to inform the local strategy about where the flood risk is;
- How the Local Strategy can provide the detail as to why specific areas may not be suitable for development and thereby feed that into the LDF;
- The local strategy could provide the evidence for local flood risk standing advice for the SAB;
- Using the best available information in the Local Strategy, setting policies for issuing Land Drainage Act consents;
- How the local strategy can influence and link to Core Strategies and Local Development Frameworks; and
- How public engagement on Core Strategies can be dovetailed with developing the local strategy.

18 Addressing the skills gap

Lead local flood authorities will need to increase their flood risk management capacity and skills in order to deliver their new responsibilities as conferred under the Flood and Water Management Act 2010. Central to this will be the ability for lead local flood authorities to become 'intelligent clients', capable of commissioning and challenging expert external advice and of potentially producing work in house if it turns out to be better value. Local Authority officers will need to understand both the technical and local issues under consideration.

The local flood risk management strategy should include details of what skills and staff will be needed to be recruited, retained and enhanced to ensure that the plans laid out in the strategy can be implemented. It will need to detail what is required not just from the lead local flood authority but from all the risk management authorities in the area for the management of local flood risk. The legislation on the local strategy notes that lead local flood authorities may release guidance to accompany the strategy. This guidance may be an appropriate place to detail any action plans to get risk management authorities up to capacity. In other words it will inform your business case to either retain or recruit new resources into your teams if appropriate.

Assessing capacity
Understanding current capacity in the organisation is crucial to deciding what steps need to be taken to improve the team. Defra has produced a 'Draft strategy for skills and capacity building in local authorities for local flood risk management' This strategy identifies the skills and capacity gaps that need to be filled to undertake the new role effectively and efficiently and establishes a summary and programme of skills and capacity building that Defra will be delivering to help address this need.

This identifies the following areas of key knowledge to be considered

- risk management approaches to local flooding
- delivering the legislative requirements
- surface water management plans
- geographical information systems and mapping skills
- sustainable drainage systems (SuDS) knowledge
- hydromorphology skills and knowledge

It is also important that certain skills which are currently found in LLFAs are maintained. These include

- planning knowledge (of the new National Planning Policy Framework and of guidance such as PPS25 while it remains current)
- highways drainage
- emergency/resilience planning
- landscape design
- delivery skills (e.g. project management, policy analysis)

Improving the capacity of the lead local flood authority

There are three main aspects of improving the capacity of LLFAs: recruiting, retraining and resourcing.

Recruiting new staff

There is currently estimated to be a 10% shortage in qualified drainage engineers in the public sector and finding appropriate staff to fill these roles may prove difficult, nonetheless recruiting from the market may be the most effective way of getting high quality skills and knowledge into the organisation. In the current economic climate long standing engineers and drainage experts are being lost and it is important that LLFAs keep their skills and capacity at a level that can deliver the requirements of the legislation.

It is also possible to recruit trainees, for example through the Environment Agency's Foundation Degree in Flood and Coastal Management, which provides local authority trainees with two years of part time training at the University of the West of England while working 3 days a week with a Local Authority.

A further option to consider is whether there can be a pooling of resources across local authorities. In two-tier systems this may involve working with officers from local planning authorities. It may also be possible to organise secondments from other organisations such as the Environment Agency or, in two-tier systems, from District Councils, who may have appropriate staff but are under financial pressure to cut costs. For example District Councils may still have experienced drainage engineers. In both Thames and North West regions, discussions have been had about Environment Agency staff working with Lead Local Flood Authorities.

Retraining current staff

Particularly in the current climate, redeployment will be a crucial element of establishing teams. There are numerous methods of providing training for staff. The Defra strategy for skills and capacity focuses on the issues that will need to be determined including

- underlying principles of learning and information provision
- training areas that should be focused on
- method and supplier of training
- target audiences for training

Defra is also providing a River and Coastal Engineering Graduate Diploma. This is a part time course for current employees of the Environment Agency which has been opened up to local authorities. There is no direct cost to the Local Authority for enrolling a member of its staff but there is a strong time commitment. The student will need to spend at least six weeks per academic year at residential courses and it would also be advisable for them to have time off to study.

Additionally level 2 and level 3 NVQ courses have been established in Environmental Conservation (namely Rivers, Coast and Waterways and Flood risk Management).

Resourcing

To aid capacity building among Lead Local Flood Authorities, Defra provided a series of workshops between January and April 2011. These covered the following topics and e-learning modules are available on the Environment Agency website http://learning.environment-agency.gov.uk/courses/FCRM/capacity/ for some of them, with the others to follow. The subjects covered were

- Understanding the New FCERM Legislation (e-learning available)
- Preliminary Flood Risk Assessments (e-learning available)
- Collaborative Working Skills (e-learning available)
- Local Flood Risk Strategies
- Modelling and Information Sharing
- Sustainable Drainage (e-learning available)

There will be further workshops in November 2011 and April 2012. The topics covered by the new workshops will include:

- Understanding the new funding regime and securing contributions through alternative funding
- Development of Local Strategies
- Consenting of changes to ordinary watercourses
- Further learning around Sustainable Urban Drainage.

A really valuable forum for sharing best practice and discussing issues is Flownet, the National Flood Risk and Water Management Community on the LG Group's Communities of Practice website (http://www.communities.idea.gov.uk/c/2050378/home.do). The community includes officers from Lead Local Flood Authorities, the Environment Agency and DEFRA as well as consultants and academics. It's one of the most active communities on the website and is a useful means of both keeping up to date with developments and comparing flood risk management activities taking place across the country.

LLFAs are also developing networks and links to share best practice and to broaden the skills base of their staff. This ranges from relatively informal network meetings such as in the East Midlands to a more formalised kind of structure such as the Yorkshire and Humber Learning and Action Alliance. These kinds of regional and local arrangements are important in building on the learning and training resources provided by Government and the Environment Agency, and ensuring that these meet the needs of localities.

What you need to consider for your local strategy....

- The skills and staff currently employed by the LLFA, and where possible in other local risk management authorities
- The skills and staff needed to deliver the new flood risk management responsibilities
- Recruitment, retention and skill enhancement needed to ensure that the plans laid out in the Local Strategy can be implemented
- Methods of increasing the skills capacity of the organisation
- Neighbours and partner organisations that will need to be involved in the plans
- How this will be tackled, including financial resources and timeframe

19 Data management

This chapter considers data and information which refers to all data, documents, facts, intelligence and advice that has been recorded. This could be in hard copy or electronic format. Formats it might involve include emails, registers, spreadsheets, maps, photographs, videos, microfilm, methodologies, reports or letters. There might be a significant amount of local information that is stored only in the heads of officers or residents. It may make sense to include some suggestions in the strategy as to how this information can be recorded.

Data sharing

In particular, the LLFA and the Environment Agency have powers to request information for flood risk and coastal erosion risk management functions from any person 'where it is required for the pursuance of their flood risk management functions. A person means a legal person i.e. an actual person but also an entity with a legal personality such as a company or a trust. These powers were commenced on 6th April 2011.

The statutory guidance, detailed below, provides guidance on how to request information from a person other than a risk management authority. All Risk Management Authorities have obligations under the Flood and Water Management Act to co-operate with other risk management authorities and so they should all be part of the local partnership to deal with flood risk. This should be the key forum through which to identify what data is required and how best to share it. Working in partnership presents data sharing challenges but also opportunities to utilise data and information in ways that can potentially transform service delivery. DCLG has published a summary report on Effective Partnership Data Management which may be a helpful guide when establishing data sharing protocols.

The strategy should highlight what systems are in place for sharing data. It should also highlight who requires access to what information and how this can be achieved.

Statutory Guidance

The Environment Agency and Defra have jointly prepared guidance on co-operation and information sharing which can be found here http://www.official-documents.gov.uk/document/other/9780108510373/9780108510373.pdf. Risk management authorities should follow the guidance which aims to facilitate constructive and active partnerships to manage risk, and to ensure information is requested in a suitable way.

It provides useful information such as principles of good information requests and a flowchart to help decide whether it is appropriate to use the power to request information. It also clarifies roles and activities for risk management authorities.

Available Data

Much of the key data has probably already been shared in the process of developing PFRAs and Surface Water Management Plans (where these have been produced). Each of the key risk management authorities will have important data. Being able to effectively share this will require both legal agreements and discussions about how data

is recorded to ensure some consistency across organisations. When dealing with regional Environment Agency teams or water companies it may make sense for an agreement to be made collectively with neighbouring LLFAs.

Environment Agency

A significant amount of the information the Environment Agency provides for LLFAs can be located on the Geostore site. The Environment Agency holds a vast array of geospatial data available on request to its partners and customers. The Geostore system allows users to register, log on, view the available data and order an electronic copy of this data in a number of different formats that are then accessed through online delivery or on CD. This data is under license and is restricted to the relevant geographical areas for which the user is registered. Some users will be required to pay for this data, however for local authorities, the majority of data is available free of charge.

Once registered for this service, users receive automatic updates of any changes made to the datasets allowing certainty that the most up to date information is in use.

However this information consists primarily of national datasets (divided by administrative boundary), so good relationships with local Environment Agency teams are important to identify what other information is available and can be shared.

District Councils

Records and processes by which data is recorded can vary hugely between districts. Some councils have large and well-organised drainage teams which have good records in the area. Other councils have no useful records. An important goal of the local flood partnerships is to agree a protocol and memorandum of understanding for how flood incidents are recorded to ensure more consistent and effective records throughout the county. This will allow effective and informed decision-making to identify where the greatest priorities are.

Water and Sewerage Companies

The key form of data that the Water Companies can share is the DG5 registers which list properties at risk of flooding from sewers due to hydraulic overload. This is based on flooding events that have actually occurred. Modelling data may also be available from water companies and it is important to discuss further with them the extent and nature of further data that they may be able to contribute.

Working with Water UK, the Environment Agency developed a protocol to share data on surface water management, agreeing to prioritise sharing historic flood records, areas covered by hydraulic models and the results of hydraulic models. The Overarching Agreement was finalised in September 2009, stating types of data to be shared. Daughter Agreements are being developed between regions and individual water companies.

Internal Drainage Boards

Drainage Boards also hold a significant amount of data usually containing information on the extent of their assets together with maintenance regimes and historical information.

Where Drainage Boards exist in local authority areas, contact should be made to share the available data.

Highways Authorities

The Highways Authority is generally part of the same organisation as the LLFA. Highways Authorities record extremely useful information about flooding on roads which they have been called to deal with. It is important that, just like district councils, a protocol and memorandum of understanding is developed to ensure that these incidents are consistently recorded in way that can be accessed by officers dealing specifically with flood risk management. In many situations it is likely that while official records may be limited, the local knowledge of highways engineers is extremely good and efforts should be made to transcribe this information.

Asset Register

The Flood and Water Management Act 2010 requires LLFAs to have a register of structures or features which are likely to have a significant effect on flood risk. This register should be available for inspection at all reasonable times. It should also have a record of these features which capture information about its ownership and state of repair, which does not need to be readily available. This element was commenced on April 6th 2011.

A decision needs to be made by the LLFA, with its partners, about what constitutes a 'significant effect on a flood risk in its area'. This can be a key part of public consultation during the development of the Local Strategy, and should then form part of the Local Strategy. The Local Strategy should also state how the register could be inspected and how often the state of repair of an asset can reasonably be expected to be monitored.

Duty to Investigate Flooding Incidents

The Flood and Water Management act requires the LLFA to investigate incidents of flooding when it is considered necessary or appropriate. Clearly not every flood that occurs and is reported can be investigated but criteria for deeming whether an investigation is necessary or appropriate should be developed and included in the strategy to ensure that this is clear to the public.

Flooding incidents are increasingly likely to be reported in the first instance to the Lead Local Flood Authority. Given that resources for this role will be limited, sensible criteria for a flood requiring investigation need to be developed and published in the strategy. The legal purpose of the investigation is to determine which risk management authority(s) has responsibility for managing the flood and if they are or plan to do so.

It is also important that an agreed process for reporting and referring flood events is in place. All reported floods, whether or not it is appropriate to investigate them, should be recorded. Similarly there may be some floods which have a clear source of the problem and can be referred to the appropriate risk management authority without an extensive investigation taking place.

As mentioned in discussion of district councils, a protocol and memorandum of understanding needs to be developed for all Risk Management Authorities so that events are recorded. It seems unrealistic to expect only the LLFA to record such events and a

more effective process would allow officers from other risk management authorities to record directly into the same register.

At the same time, the criteria used for determining which incidents will investigated and which will not should also be made clear in the Local Strategy, so that the public can be clear about the approach that the LLFA will take and the reasons for this.

What you need to consider for your local strategy....

- Understand what data and information is needed
- Understand what data and information is available from each Risk Management Authority
- Put in place arrangements to share the information, taking account of statutory and non statutory guidance
- Have a clear record of what information is available and where it can be accessed
- The data gathered will provide the evidence base for many of the policies the Local Strategy will produce, such as what constitutes “a significant effect on flood risk in the area” for recording assets, or when it is “necessary and appropriate” for a lead local flood authority to investigate a flooding incident

20 Conclusions

Whilst this framework is not intended to be prescriptive on how Lead Local Flood Authorities might approach their development of their local strategy, it is intended to give clear guidance on what aspects should be considered.

Like the National Strategy, this framework is also a living document and will be updated regularly as required to capture developments in National Policy, the commencement of additional parts of the Flood and Water Management Act, and to clarify future funding arrangements.

The reputations of lead local flood authorities will depend in no small degree upon their capacity to implement the proposals they put forward in their strategies. To this end, the LGA will endeavour to keep this guidance up to date and also communicate new funding arrangements to lead local flood authorities and assist them with any queries they have about maintaining and implementing their local strategies.

Appendix

The following table is intended to provide the key requirements, legislative context and timescales.

Requirements	Sub-requirements / Details	Legislation	Duty or Power	National Deadline
Strategy Develop, maintain, apply and monitor a Strategy for local flood risk management of the area. Local flood risk means flood risk from surface runoff, groundwater and ordinary watercourses.	The Strategy must specify: • The risk management authorities in the authority's area; • The flood and coastal erosion risk management functions that may be exercised by those authorities in relation to the area; • The objectives for managing local flood risk (including any objectives included in the authority's flood risk management plan prepared in accordance with the Flood Risk Regulations 2009); • The measures proposed to achieve those objectives; • How and when the measures are expected to be implemented; • The costs and benefits of those measures, and how they are to be paid for • The assessment of local flood risk for the purpose of the Strategy; • How and when the Strategy is to be reviewed and • How the Strategy contributes to the achievement of wider environmental objectives. The Strategy must be consistent with the Environment Agency's National Strategy. All risk management authorities, in exercising their flood and coastal erosion risk management functions, must act in a manner which is consistent with the National Strategy and Local Strategy respectively (except in the case of a water authority for the latter, who must have regard for the Local Strategy). The LLFA must consult all affected risk management authorities and the public about the Strategy, and in turn the Environment Agency must consult the LLFAs and public in the production of the National Strategy.	Flood and Water Manageme nt Act 2010	Duty	None

Preliminary Flood Risk Assessment (PFRA) Report Prepare a PFRA in relation to flooding in the LLFA's area. The LLFA is not required to include information about flooding from the sea, Main Rivers and reservoirs unless the authority thinks that it may affect flooding from another source. The Environment Agency must review the PFRA report and may recommend modifications, following which the LLFA may revise its PFRA.	A PFRA is a report about past floods and the possible harmful consequences of future floods. The report must be based on relevant information which: • Is in the possession of the person preparing the report; • Is in the possession of the Environment Agency; • Is in the possession of an authority listed in regulation 36(3); • Is available to the public. The floods to be included are those which had significant harmful consequences for human health, economic activity or the environment (including cultural heritage), or which would have significant harmful consequences for those matters if they were to occur now. The report may ignore past floods of a kind that are not likely to occur now. The report must include: • Any information that the person making the report has about the extent and the conveyance route of past floods, and • An assessment of the harmful consequences of past floods. The assessment of possible consequences of future floods must take account of: • Topography, • The location of watercourses, • The location of floodplains that retain flood water, • The characteristics of watercourses, • The effectiveness of any works constructed for the purpose of flood risk management, • The location of populated areas, • The areas in which economic activity is concentrated, and • The current and predicted impact of climate change and any other long term developments. A LLFA must have regard to any guidance issued by the Environment Agency about the form of a PFRA.	Flood Risk Regulations 2009	Duty	22nd Dec 2011 (EA to publish)

Identify areas of significant flood risk A LLFA must determine whether, in its opinion, there is a significant flood risk in its area, and identify the part of the area affected by the risk (the "flood risk area"). Flood risk from sources including Main Rivers, the sea and reservoirs do not need to be taken into account unless the authority thinks that it may affect flooding from another source. The authority may have regard to any guidance issued by the Minister about the criteria for assessing whether a risk of flooding is significant.	The Environment Agency will provide LLFA with core national datasets and proposed 'areas of significant risk'. The LLFA will subsequently review these data and the proposed 'areas of significant risk' using local knowledge and information. Proposed amendments or additions to the 'areas of significant risk' will need to be included in the preliminary assessment report which the LLFA must provide to the Environment Agency. The Environment Agency must review the determination and identification of flood risk areas and may recommend that the lead local flood authority identifies a different flood risk area, an additional flood risk area, or no flood risk area. If the lead local flood authority disagrees with a recommendation of the Agency, the matter must be referred to the Minister, who must determine the flood risk area (if any) for which the LLFA must prepare a flood hazard map and a flood risk map under regulation 19.	Flood Risk Regulations 2009	Duty	Dec 2011 (EA to publish)
Prepare flood hazard maps and flood risk maps A LLFA must prepare, in relation to each identified area of significant risk, a flood hazard map and a flood risk map. Flood risk from sources including Main Rivers, the sea and reservoirs do not need to be taken into account unless the authority thinks that it may affect flooding from another source. The Environment Agency must review flood hazard maps and	A **flood hazard map** is a map which identifies flood risk areas and shows: • The likely extent (including water level or depth) of possible floods, • The likely direction and speed of flow of possible floods, and • Whether the probability of each possible flood occurring is low, medium or high (in the opinion of the person preparing the map). The following may be ignored: • A medium or high probability flood caused only by groundwater, • A medium or high probability flood which would affect only an area of coastline that, in the opinion of the person preparing the map, is adequately protected against flooding. For the purposes of this regulation:	Flood Risk Regulations 2009	Duty	Dec 2013

flood risk maps and may recommend modifications.	• Low flood risk = chance of occurrence in any one year is 0.1% or less (Flood Zone 1) • Medium flood risk = chance of occurrence in any one year is between 0.1% and 1% (Flood Zone 2) • High flood risk = chance of occurrence in any one year is > 1% (Flood Zone 3). A **flood risk map** is a map showing in relation to each flood risk: • The number of people living in the area who are likely to be affected in the event of flooding, • The type of economic activity likely to be affected in the event of flooding, • Any industrial activities in the area that may increase the risk of pollution in the event of flooding, • Any relevant protected areas that may be affected in the event of flooding, • Any areas of water subject to specified measures or protection for the purpose of maintaining the water quality that may be affected in the event of flooding, and • Any other effect on human health, economic activity or the environment (including cultural heritage).			
Prepare flood risk management plans A LLFA must prepare a flood risk management plan for each area of significant risk. The Environment Agency must review a flood risk management plan prepared under this regulation and may recommend modifications. The LLFA must consult the authorities that may be affected	The plan must include details of objectives set by the person preparing the plan for the purpose of managing the flood risk, and the proposed measures for achieving those objectives (including measures required by any provision of an Act or subordinate legislation). In setting the objectives, the person preparing the plan must have regard to the desirability of reducing the adverse consequences of flooding for human health, economic activity or the environment (including cultural heritage), and reducing the likelihood of flooding, whether by exercising powers to carry out structural work or otherwise. The measures must, in particular, include measures relating to: • The prevention of flooding, • The protection of individuals, communities and the environment	Flood Risk Regulations 2009	Duty	Dec 2015

by the plan, and the public regarding the content of the flood risk management plan and have regard for guidance issued by the EA.	against the consequences of flooding, and • Arrangements for forecasting and warning. In determining the proposed measures for achieving the objectives, the person preparing the plan must have regard to: • The costs and benefits of different methods of managing the flood risk, • The information included in the flood hazard map and the flood risk map, • The river basin management plan for the area, • The effect of floodplains that retain flood water, • The environmental objectives, within the meaning of regulation 2 of the Water Environment Regulations, and • The likely effect of a flood, and of different methods of managing a flood, on the local area and the environment. A flood risk management plan must include: • A map showing the boundaries of the flood risk area, • A summary of the conclusions drawn from the flood hazard maps and flood risk maps for the area, • A description of the proposed timing and manner of implementing the measures, including details of the bodies responsible for implementation, • A description of the way in which implementation of those measures will be monitored, • A report of the consultation, and • Where the person preparing the report thinks it appropriate, information about how the implementation of measures under the flood risk management plan and the river basin management plan for the area will be co-ordinated.			
Co-operation Authorities must co-operate with each other in exercising	Authorities can delegate functions to each other by local agreement (except the Strategy). Risk Management Authorities may share information with each other for the purposes of discharging their duties.	Flood and Water Manageme	Duty	Ongoing

functions under both the Act and the Regulations.		nt Act 2010 & Flood Risk Regulations		
Power to Request Information LLFAs and the Environment Agency may request a person to provide information in connection with the authority's risk management functions.	The information must be provided in the form/manner and period specified within the request. An enforcement notice may be given if the person fails to comply with the request. A penalty may also be imposed.	Flood and Water Manageme nt Act 2010 & Flood Risk Regulations	Power	Ongoing
Duty to Maintain a Register Establish and maintain a register of structures, including ownership which are believed to have a significant effect on a local flood risk.	Must be available for public inspection.	Flood and Water Manageme nt Act 2010	Duty	None
Investigations To ensure greater co-ordination of information and avoid situations where authorities do not accept responsibility, the LLFA is required to investigate flooding incidents in its area (where other risk management authorities do not respond and to the extent that it considers necessary or appropriate) to identify which authorities have relevant functions to deal with the flood and whether each of them intends to respond.	The LLFA is required to publish the results of any investigation and notify any relevant authorities.	Flood and Water Manageme nt Act 2010	Duty	Ongoing

Sustainable Development In exercising its risk management functions, LLFAs must contribute towards achievement of sustainable development.	-	Flood and Water Manageme nt Act 2010	Duty	Ongoing
Incidental Flooding If the conditions below are satisfied, a LLFA may plan, erect, maintain, alter or remove buildings or other structures (including those built for flood defence purposes) in a way that will or may cause flooding, and increase in the amount of water below ground or coastal erosion. The conditions are: • That the authority considers the work in the interests of nature conservation, preservation of cultural heritage or people enjoyment of the environment or cultural heritage; • The authority considers the benefits of the work will outweigh the harmful consequences listed above; • The authority has consulted the Environment Agency and has gained consent if any work affects Main River;	All works must have regard for the national and local flood risk management strategies.	Flood and Water Manageme nt Act 2010	Power	Ongoing

• The authority has consulted any other local authorities and land owners who may be affected by the work.				
Designation of Features LLFAs have powers to designate structures and features that affect flooding, to overcome the risk of a person altering or removing a structure or feature (that, for example, may be on private land and is relied on for flood risk management) without consent.	A conditional Power of Entry onto land exists for an authorised person to ascertain any offences in relation to designated structures. The EA, district councils and the IDB are also empowered to act as a designating authority.	Flood and Water Manageme nt Act 2010	Power	Ongoing
Sustainable Drainage LLFAs must establish a SuDS Approving Body (SAB), having a range of responsibilities including: • The approval of proposed drainage systems in new and redevelopments; • Determining the drainage application in compliance with new National Standards; • Adopting and maintaining SuDS which serve more than one property, where they have been approved; • Designating SuDS on private property as features that affect flood risk and, on	-	Flood and Water Manageme nt Act 2010	Duty & Power	Ongoing

the same register, detailing all approved SuDS structures and features; • Approving the right for new developments to connect their surface water drainage to the public sewerage system; • Applications may be 'free-standing' where planning permission is not required or can 'combined application' with planning permission; • A non-performance bond may be required from the developer as a deposit.				
General Powers: Flood Risk Management Works LLFAs have powers to undertake works to manage flood risks from surface runoff and groundwater. Powers to do works on ordinary watercourses remain with either district authorities or IDBs (but all works must be consistent with the Local Flood Risk Management Strategy).	LLFAs will take over the Environment Agency's role in deciding whether to allow works by third parties that may affect water flows to take place (with the exception of new and replacement culverts which still require EA consent). LLFAs overview and scrutiny committee may make recommendations which other RMAs must have regard to. This is an important opportunity for councils to engage with key stakeholders such as the EA and water companies.	Flood and Water Manageme nt Act 2010	Power	Ongoing

Glossary

ABI	Association of British Insurers
Act	A Bill approved by both the House of Commons and the House of Lords and formally agreed to by the reigning monarch (known as Royal Assent)
ADA	Association of Drainage Authorities
Assets	Structures or a system of structures used to manage flood risk.
Building Regulations	The UK Building Regulations are rules of a statutory nature to set standards for the design and construction of buildings, primarily to ensure the safety and health for people in or around those buildings, but also for purposes of energy conservation and access to and about other buildings
Catchments	An area that serves a river with rainwater that is every part of land where the rainfall drains to a single watercourse is in the same catchment.
CFMP	Catchment Flood Management Plan
CLA	Country Land and Business Association
Climate change	The change in average conditions of the atmosphere near the Earth's surface over a long period of time.
Coastal erosion	The wearing away of the coastline, usually by wind and/or wave action.
Coastal flooding	Occurs when coastal defences are unable to contain the normal predicted high tides that can cause flooding, usually when a high tide combines with a storm surge (created by high winds or very low atmospheric pressure).
Cultural heritage	Buildings, structures and landscape features that have an historic value.
Culvert	A covered structure under a road, embankment etc, to direct the flow of water.
DCLG	Department for Communities and Local Government
Defences	A structure that is used to reduce the probability of floodwater or coastal erosion affecting a particular area (for example a raised embankment or sea wall)
Defra	Department for Environment, Food and Rural Affairs
Deposition	The process whereby sediment is placed on the sea bed, shoreline, river bed or floodplain.
Drainage authorities	Organisations involved in water level management, including IDBs, the Environment Agency, and RFDCs.
FCERM	Flood and coastal erosion risk management
Flood	The temporary covering by water of land not normally covered with water
Groundwater flooding	Occurs when water levels in the ground rise above the natural surface. Low-lying areas underlain by permeable strata are particularly susceptible.
IDB	Internal drainage board
Important infrastructure	Infrastructure that supplies essential services, for example, water, energy, communications, transport.

LGA	Local Government Association
LLFA	Lead local flood authority
Main River	A watercourse shown as such on the Main River Map, and for which the Environment Agency has responsibilities and powers
NFU	National Farmers Union
Ordinary watercourses	All watercourses that are not designated Main River, and which are the responsibility of Local Authorities or, where they exist, IDBs.
Recovery	The process of rebuilding, restoring and rehabilitating the community following an emergency.
Reservoir	A natural or artificial lake where water is collected and stored until needed. Reservoirs can be used for irrigation, recreation, providing water supply for municipal needs, hydroelectric power or controlling water flow.
Resilience	The ability of the community, services, area or infrastructure to withstand the consequences of an incident.
RFDC	Regional flood defence committee
RFCC	Regional flood and coastal committee
Risk	Measures the significance of a potential event in terms of likelihood and impact. In the context of the Civil Contingencies Act 2004, the events in question are emergencies
Risk assessment	A structured and auditable process of identifying potentially significant events, assessing their likelihood and impacts, and then combining these to provide an overall assessment of risk, as a basis for further decisions and action.
Risk management authorities	Organisations that have a key role in flood and coastal erosion risk management as defined by the Flood and Water Management Act (2010). These are the Environment Agency, lead local flood authorities, district councils where there is no unitary authority, internal drainage boards, water companies, and highways authorities.
River flooding	Occurs when water levels in a channel overwhelms the capacity of the channel.
RSPB	Royal Society for the Protection of Birds
SEA	Strategic environmental assessment
SMP	Shoreline Management Plan
Standard of protection	The flood event return period above which significant damage and possible failure of the flood defences could occur.
SuDS	Sustainable drainage systems
Surface water flooding	Occurs when the level of rainfall overwhelms the capacity of the drainage system to cope.
SWMP	Surface Water Management Plan
Voluntary groups	Self-governing organisations, some being registered charities, some incorporated non-profit organisations. They deliver work for the public benefit using volunteers.
Watercourse	A channel (natural or artificial) along which water flows