Partnership funding and collaborative delivery of local flood risk management: a practical resource for LLFAs

March 2012

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(FD2643)

Foreword

This document was prepared by Halcrow Group Limited with CIRIA, on behalf of Defra. The following organisations comprised the steering group of this project and have formally approved the document for public release:

- Defra
- Environment Agency
- Ofwat
- Association of Drainage Authorities
- Consumer Council for Water
- Association of British Insurers
- Hertfordshire County Council
- Southern Water
- Worthing Borough Council
- Lincolnshire County Council
- North Yorkshire County Council
- Bradford Metropolitan District Council

Our thanks go to all those who have contributed to the development of this Guidance, including everyone who supplied information for the case studies.

Document navigation tips:

This document is prepared as an interactive pdf. Each page has a navigation bar on the bottom left which allows to you move forward or backward by one page, to jump between chapters, or to return to the current chapter contents. There are also icons which will take you to the contents page and glossary.

Adobe Reader also provides its own navigation functions, including ***return to last page viewed***, which can be accessed either by right clicking anywhere on the document and selecting from the menu, or via the appropriate keyboard shortcuts.

The document can be viewed full screen (press 'Escape' to exit), minimised or closed via the usual MS Office document menus.

Alongside this Guidance we have provided a simple decision support tool (DST) as a starting point to help identify potentially appropriate partners and funding sources for specific circumstances. This can be accessed from Appendix A.

The guidance is intended as an introductory guide. It aims to reflect information correct up to the end of 2011 but it is possible that changes (for instance to specific funding schemes) may have occurred since which are not reflected. Users should check up to date sources concerning information about partners and the conditions or availability of funding sources as appropriate where this information is critical to the development of investment plans. Lead Local Flood Authorities are advised to monitor Defra's website for further guidance and tools to help with investment planning for local flood risk management.

Executive Summary

This guidance is primarily aimed at officers with responsibilities for flood risk management within Lead Local Flood Authorities (LLFAs), to support them in the development and application of their Local Flood Risk Management Strategies under the Flood and Water Management Act 2010.

The document is intended to supplement other guidance available from Defra, the Local Government Association and the Environment Agency.
It promotes successful collaboration and partnership funding for local flood risk management by enhancing LLFAs' understanding of the roles and motivations of those likely to be involved and the potential funding sources available. This is augmented by practical guidance on how opportunities for collaboration and joint funding can be explored and built into the development of local Strategies and schemes.

This guidance includes:

- Information on potential partner organisations
- Information on potential funding sources
- Selected case studies of successful partnership funding approaches
- Q&A based decision support tool to help identify partners and funding sources
- Practical advice on motivating and engaging with partners to help maximise chances of identifying and realising funding opportunities

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Glossary

Defra	Department of Environment, Food and Rural Affairs
EA	Environment Agency
FWMA	Flood and Water Management Act (2010)
LFRM	Local Flood Risk Management. A process to reduce the probability of occurrence through the management of land, river systems and flood defences and reduce the impact through influencing development on flood risk areas, flood warning and emergency response
FRR	Flood Risk Regulations (2009)
IDB	Internal Drainage Board. Local public body to manage flood risk & water levels in areas of special drainage need.
LGA	Local Government Association
LLFA	Lead Local Flood Authority, as defined in the Flood and Water Management Act
Local Flood Risk	Defined in the Flood and Water Management Act as flooding from surface runoff, ordinary watercourses and groundwater
National Strategy	National Flood & Coastal Erosion Risk Management (FCERM) Strategy for England, developed by EA
PFRA	Preliminary Flood Risk Assessment
RFCC	Regional Flood and Coastal Committee
Riparian Owner	Anyone who owns land or property alongside a river or other watercourse. Responsibilities include maintaining river beds/banks and allowing flow of water to pass without obstruction. See EA publication 'Living on the Edge'.
SFRA	Strategic Flood Risk Assessment
SuDS	Sustainable Drainage Systems. SuDS are drainage systems which are designed to reduce the impact of urbanisation on the hydrology of a river system
SWMP	Surface Water Management Plan
WaSC	Water and Sewerage Company
WFD	Water Framework Directive

Chapter one – introduction

Chapter objectives

After reading this chapter users should understand:

- Who this guidance is intended for
- The purpose of the guidance
- How and when this guidance is intended to be used
- The structure of the document
- What assumptions have been made

Chapter contents

Context

Major flooding events across the UK in recent years have focused political attention on local flood risk as a result of the social, economic, and in some cases fatal consequences. New legislation has been introduced recently to improve the management of flood risk. The Flood Risk Regulations (2009) implement the EU Floods Directive and have links to the Water Framework Directive. The Flood and Water Management Act 2010 (FWMA) brings together the recommendations of the Pitt report and previous policies to create a more comprehensive and risk based regime for managing the risk of flooding from all sources. FWMA imposes new and updated responsibilities on Lead Local Flood Authorities (LLFAs; see information box). One such is the production of Local Flood Risk Management Strategies (LFRMS), which set out the framework for managing local flood risk within each LLFA's area.

The LFRMS must identify measures for managing local flood risk, including benefit cost appraisal, funding proposals and an implementation plan. Whilst LLFAs are mandated to reduce local flood risk, they cannot do this alone by simply improving the highways and public realm infrastructure over which they have direct responsibility. They will need to work in partnership with other stakeholders who have relevant responsibilities and/or assets (including highways and planning authorities, Water and Sewerage Companies, Internal Drainage Boards, the Environment Agency and other local authorities) to deliver improvements. In addition, other risk management authorities have responsibilities to act consistently with, or have regard to, the LFRMS so their buy-in is important.

Successful delivery of LFRM measures will require innovative ways of working and funding, based on teamwork and trust. Collaborative working and joint funding across partner organisations will be key to maximising the return on investment in flood risk management.

Defra's new partnership funding approach means that the ability of LLFAs to leverage contributions (both financial and in kind) from local partners could make the difference between locally-important projects going ahead or not. The new Localism Act 2011 provides local authorities with new freedoms and flexibility, including more financial freedom to encourage bespoke local funding arrangements. Recommendation 24 of the Pitt Review highlights the value of allowing and encouraging local communities to invest in flood risk management.

Key definitions

The Flood and Water Management Act 2010 contains the following definitions relating to Local Flood Risk Management (LFRM):

(1) A lead local flood authority for an area in England must develop, maintain, apply and monitor a strategy for local flood risk management in its area (a "local flood risk management strategy").

(2) In subsection (1) "local flood risk" means flood risk from—
(a) surface runoff,
(b) groundwater, and
(c) ordinary watercourses.

(7) "Lead local flood authority" in relation to an area in England means—
(a) the unitary authority for the area, or
(b) if there is no unitary authority, the county council for the area.

Purpose

This document has been developed to complement existing guidance, not replace it. This document therefore does not prescribe the content of a LFRMS, which is set out in section 9 of the FWMA. It also does not provide guidance on the development of the LFRMS which is covered by the Local Government Association (LGA) document Preliminary Framework to assist the development of the Local Strategy for Flood Risk Management and the Environment Agency's LFRMS e-learning modules http://learning.environment-agency.gov.uk/courses/FCRM/capacity/.

At the outset of this guidance, a survey of LLFAs was undertaken to identify those areas where additional guidance would be beneficial. In response to the results of the survey (summarised in information box opposite), this guidance focuses on accessing potential funding sources and motivating potential partners to contribute (both financially and in kind).

In direct response to the perceived lack of knowledge of regulatory systems and funding time cycles, focussed information is provided to help LLFAs understand these issues when planning and implementing partnership funding and collaborative working for LFRM.

LLFA survey key findings:

Successes

High proportion of local authorities were already undertaking collaborative working in some form or other.

LLFAs accessing contributions in kind from external partners (eg. data provision, technical support)

Challenges

Direct provision of funding is low

Limited understanding of funding sources and cycle

Limited understanding of potential partners, their approval mechnisms and regulatory processes

Content

This guidance provides:

- Information on potential partner organisations
- Information on potential funding sources
- Case studies of successful partnership funding approaches
- Q&A based decision support tool to help identify partners and funding sources
- Practical advice on motivating and engaging with partners to help maximise chances of identifying and realising partnership funding opportunities

Assumptions and definitions

It is assumed that the user will already have a good level of knowledge about local flood risk management and the relevant legislation. LLFAs have already been required to submit their Preliminary Flood Risk Assessments under the Flood Risk Regulations 2009, therefore it is also assumed that they will have a good level of information about flood risk in their area from this exercise. To provide a focal starting point for this guidance it has been assumed that users will be in the process of developing/updating their Local Flood Risk Management Strategy and delivering the measures identified within the associated action plan. In some instances the measures may be based on work already done to produce Surface Water Management Plans and other relevant studies.

Whilst funders and partners are interrelated and there is likely to be some crossover between the two, they are treated separately because different combinations of each will be more relevant according to specific circumstances. The distinction made between the two for the purposes of this guidance is as follows:

Funding sources: *provide money to LLFAs to enable them to finance local flood risk management measures.*

Partners: *work alongside LLFA in close collaboration to achieve common local flood risk management objectives.*

Other relevant guidance and advice

Defra has produced a guidance note on its new partnership funding approach. There is also guidance on funding available through the Environment Agency's flood and coastal risk management investment and funding web pages.

The Local Government Association (LGA) document Preliminary Framework to assist the development of the Local Strategy for Flood Risk Management provides practical advice on preparing the LFRMS to comply with the FWMA, as do the Environment Agency's LFRM e-learning modules.

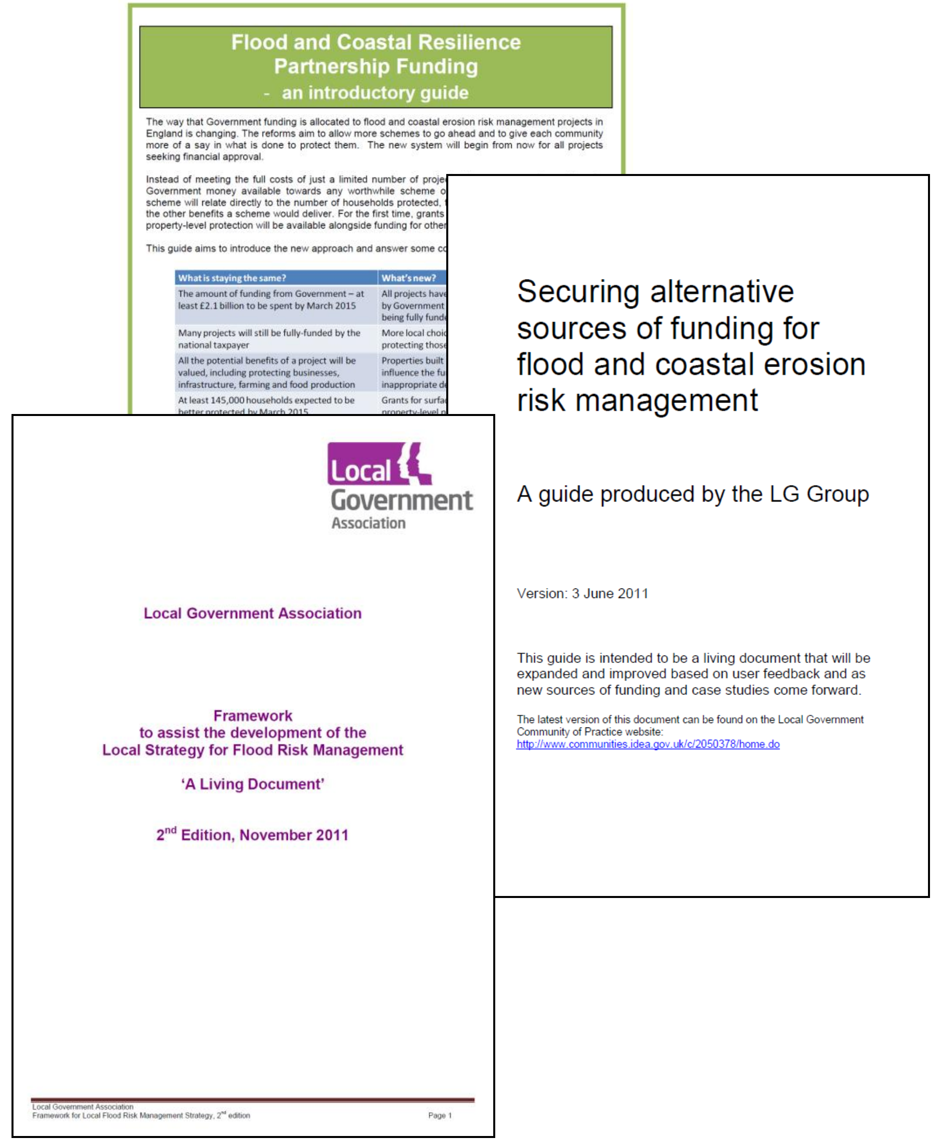
GRANTfinder is the UK's leading grants and policy database and includes up to date details of over 7,000 funding opportunities.

The LGA document Securing Alternative Sources of Funding for Flood and Coastal Erosion Risk Management is the predecessor to this more comprehensive guidance. Its content is incorporated in Chapter 4 of this document.

The Local Government Association FlowNet Community of Practice on their KnowledgeHub website is a useful source of information and knowledge sharing for local authorities and others working with them in the field of flood risk management.

The Local Government Association website provides an increasing collection of case studies for reference by LLFAs: Case studies of local authority flood risk management partnerships on the IDeA flood pages

The Surface Water Management Plan Technical Guidance provides information on roles in flood risk management and how partnerships can be established, solutions investigated and action plans taken forward.



Chapter two – practical guidance

Chapter objectives

This chapter provides practical guidance to support local authority officers with flood risk management responsibilities in identifying and realising opportunities for collaboration and partnership funding, to support the delivery of Local Flood Risk Management Strategies. An assumption has been made that users will be in the process of developing/updating their Local Flood Risk Management Strategy and delivering the measures identified within the associated action plan. The guidance is structured to align with the key stages of local flood risk management.

This chapter includes:

- Practical support for local authority officers with flood risk management responsibilities looking to identify and access potential funding sources

- Suggestions for maximising the potential for partner contributions to LFRM, presented in a structured way to align with the LFRMS process.

- Information about the opportunities and challenges associated with collaborative projects and partnership funding approaches, to help LLFAs appreciate the key areas of risk and ensure that appropriate mitigation measures are put in place at the earliest stages

Chapter contents

The importance of collaboration

Management of local flood risks (from minor watercourses, surface runoff and groundwater) should not be considered in isolation. It needs to be addressed in conjunction with management of flood risk from main rivers, the sea and sewers. An integrated approach is therefore necessary, and this will require close collaboration between all relevant risk management authorities within an area (and often across administrative boundaries). The number of different parties with responsibility for various aspects of local flood risk mean that solutions frequently cannot be delivered successfully by any one organisation alone. The co-ordination and collaboration of a number of different partnering organisations including the LLFA, highways and planning departments, Water and Sewerage companies (WaSCs), Internal Drainage Boards (IDBs), the Environment Agency, Inland Waterways and other adjacent or different tier local authorities is required. Co-ordination of works and partnership delivery of risk management measures has been proven to offer multiple benefits for stakeholders by delivering more cost effective solutions which achieve broader objectives.

Furthering collaboration to bridge the funding gap

From the survey we know that LLFAs are already experienced at partnering. Changes in Defra's funding approach build on this by encouraging local contributions to promote local ownership of flood risk solutions. LLFAs now have the opportunity to promote local solutions which do not meet the criteria for full Defra funding, but to do so they must either reduce the cost of the solution or leverage contributions from alternative sources to close the funding gap. Partnership working can hold the answer for both of these approaches.

Partners may be able to support LLFAs by:

- Sharing knowledge, expertise and resources to reduce the cost of solutions by reducing the work involved
- Making direct financial contributions to help fund local flood risk measures (see below explanation of measures)
- Delivering solutions on behalf of LLFAs, or helping to meet LLFA aims by adapting their own projects

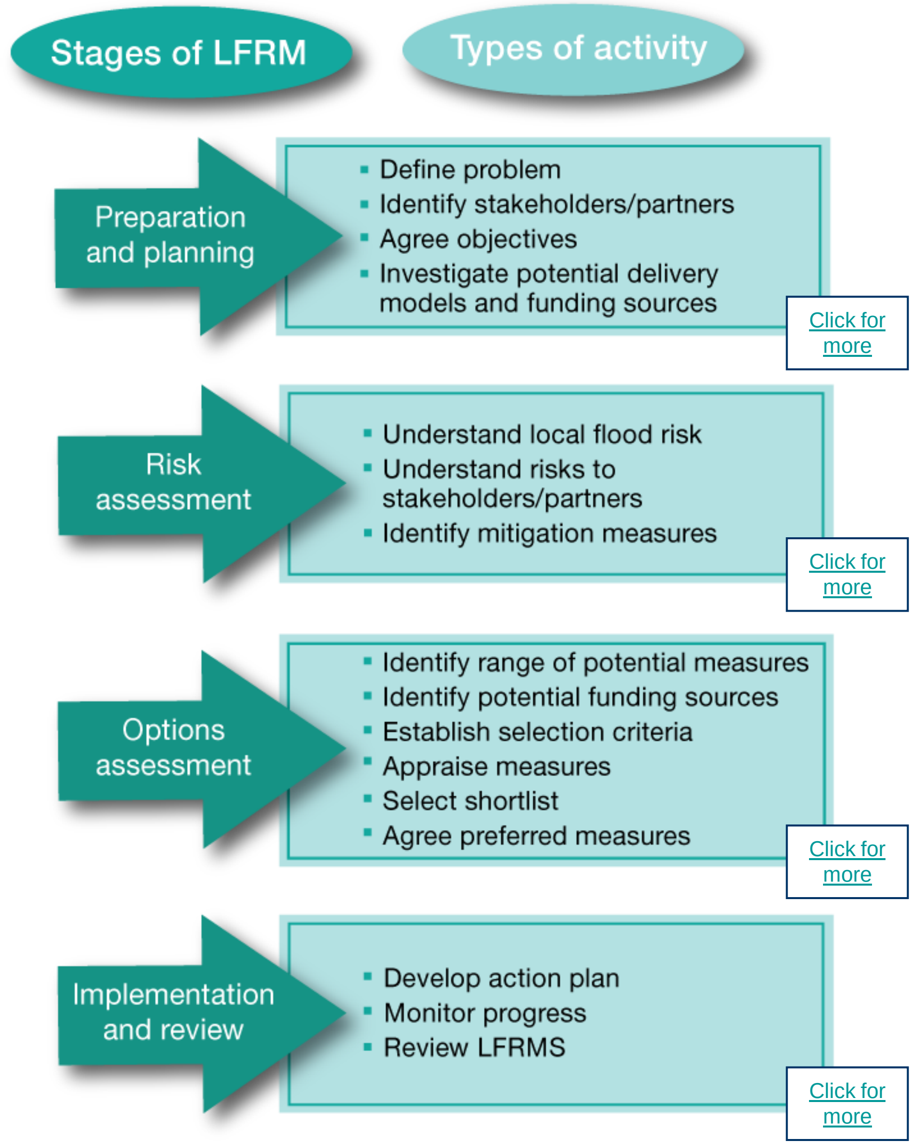
LLFAs will need to identify integrated technical solutions to manage local flood risk in collaboration with partners, and to plan and deliver measures with and through other risk management authorities. This guidance provides LLFAs with information about potential partners to facilitate these aims. LLFAs are recommended to develop their LFRMS collaboratively with local partners. This will enable partners to discuss individual and joint priorities, seek opportunities for partnering to deliver value for money, and identify potential funding requirements from the earliest stages of planning.

Different partners may agree to fund and undertake LFRM activities, jointly or independently, over the time period of the plan. In order to develop a scheme action plan (or LFRM strategy investment plan) the LLFA (or other lead partner) will benefit from an understanding of the different funding and approval systems that other partners operate within. LLFAs also need to be aware of how and when they can access appropriate funding streams, so this guidance provides information about potential sources of funding.

The local flood risk management process

The way LLFAs approach development of their local flood risk management strategy (and action plans to implement this) will vary depending on the type and complexity of flood risks in their area and the size of the area being considered. For example: a unitary authority covering a single urban or conurbation area with complex interrelated flood risks might approach its management through development of a SWMP for the whole area. The Surface Water Management Plan (SWMP) action plan could consist of a series of schemes (and other measures) and form the basis of its LFRMS. A larger unitary or shire area with distributed rural and some concentrated urban flood risks might better suit a LFRMS which combines a range of smaller scale local actions together with a programme of wider-ranging measures and schemes from several SWMPs focusing on the main urban centres. When preparing the LFRMS issues such as high level governance, forming the core partnership, common objectives, partners' existing investment plans and any potential restrictions on collaboration should be addressed. At scheme level considerations relate more to specific data sets, time inputs, availability of funding and technical approaches.

This guidance follows the key stages of the LFRM process, as illustrated in the flowchart opposite. Practical advice is provided to help stimulate, identify and realise opportunities for partnership funding, collective delivery and contributions in kind at each stage of the process.



Delivery models for partnership funded projects

There are multiple alternative models for delivering partnership projects. There may be one or more funding sources/partners involved, and one or more delivery partners. These may be the same or different organisations. The main forms of model are as follows:

- One funding source/partner – one delivery organisation
- One funding source/partner – multiple delivery partners
- Multiple funding sources/partners – one delivery partner
- Multiple funding sources/partners – multiple delivery partners

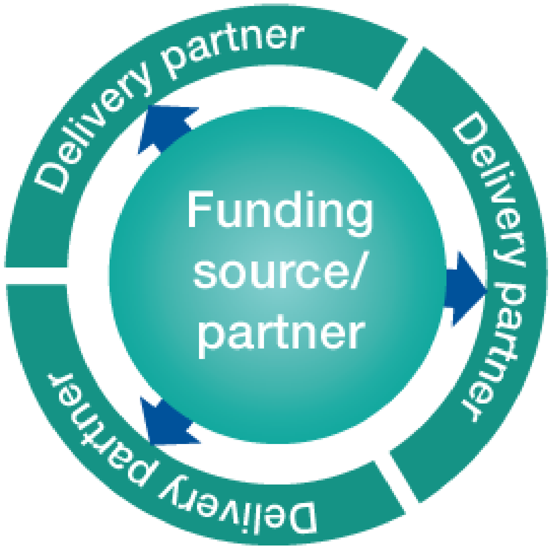
Different arrangements may work better depending on the types of organisation involved, their regulatory systems and other accountabilities. For example, an organisation with shareholders' interests to account for may prefer to retain direct financial accountability, so if several such organisations were contributing funding then a likely model could be; "multiple funders – multiple delivery organisations". This would allow each one to fund and undertake in-house specific elements of an overarching shared programme of work. On the following page mitigation measures are identified to help address key risks associated with multiple partner projects.

Local flood risk management measures

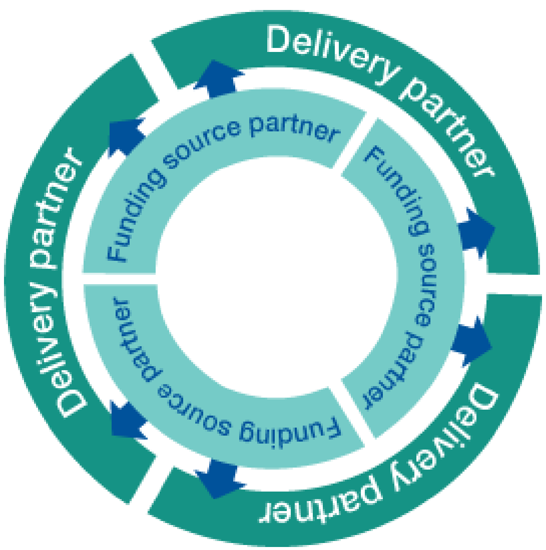
There is a wide range of measures which could be used in local flood risk management. These can be broadly summarised as:

- Engineering interventions (typically know as engineering schemes)
    - i. Source (e.g. attenuation basins)
    - ii. Pathway (e.g. channel improvements, daylighting culverts)
    - iii. Receptor (e.g. property level resilience and resistance measures)
- Information and education
- Making policy (e.g. to direct spatial planning or set standards for development)
- Emergency planning measures, including flood warning

One funder – many deliverers



Multiple funders – multiple deliverers



Running multiple-partner projects – key areas of risk and suggested mitigation measures

Agree who will have responsibility for overall programme management.

Agree common approach for prioritisation and decision making.

Identify any delivery interfaces, highlight critical ones and agree how these will be managed.

Identify and allow for potential impacts of individual partners' spending profiles.

Agree how partners will be held accountable for delivering to programme – as a group investigate options for incentivising and/or penalising partners.

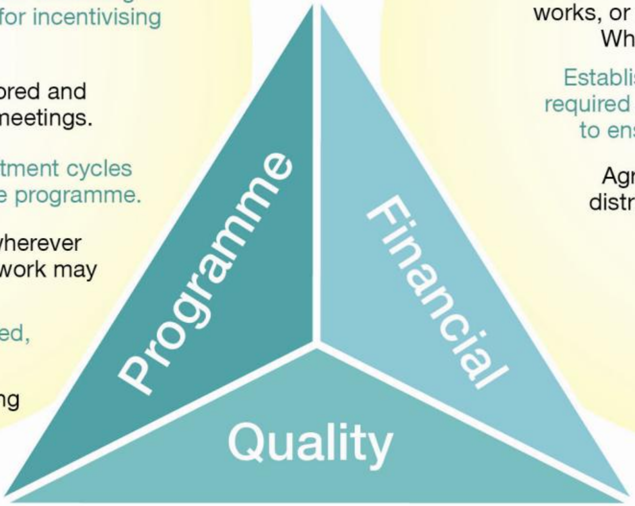
Establish how progress will be monitored and reported – schedule regular updates/meetings.

Identify whether partners' individual investment cycles could affect resource availability and hence programme.

Build flexibility into the programme wherever practicable, given that the phasing of work may not turn out as envisaged.

Agree how delays will be identified, reported and managed.

Establish a protocol for managing risks to delivery



Identify which partner is best placed to take ownership of financial risk (overspend) or how risk should be apportioned between parties

Agree what will happen to any unspent funding (e.g. is it possible to hold funds over for future works, or would it need to be returned to source What are there implications of this?

Establish level of financial accountability is required and put appropriate systems in place to ensure transparency and auditability.

Agree how funding will be held and distributed (e.g. a shared funding pot, individual contracts)

Agree shared criteria or performance indicators for success (e.g. Key Performance Indicators), and a monitoring schedule.

Agree what quality processes will be used.

Establish intervention mechanisms to be implemented if success criteria are not being (or going to be) achieved.

Agree a course of action for legal redress if one or more partners fail to meet agreed standards.

Practical advice for preparation and planning stage

Establishing how the various accountabilities of partners affect achievable levels of collaboration

Discuss with partners how data sharing will be managed. Confidentiality agreements may be required to provide reassurance about the sharing of confidential and commercially sensitive data. Understanding these issues now will help build trust between partners, making them more likely to contribute data which may help to reduce project costs (as in Camborne, Pool and Redruth where water company information about the potential cost of upgrading the sewage treatment works helped justify investment in alternative measures).

Understand the restrictions that partners' financial accountabilities may place on the handling of funds. This could affect the choice of funding/delivery model. Partners may have other accountabilities, such as corporate environmental responsibilities or procurement rules, that could also pose restrictions on how work is managed amongst the group and appropriate mitigations should be put in place.

Exploring opportunities presented by partners' existing investment plans

Core partners' current and future investment plans may include schemes which could contribute to LFRMS objectives, or which could be adapted/extended to support LFRM work. Seeking synergies now can reduce costs by maximising opportunities for partners to contribute via work in kind or by delivering discrete elements of the LFRMS which align with their own programmes and objectives.

Take into account the potential impact of partners' organisational investment programmes on the LFRMS where achievement of objectives is reliant on work scheduled by individual partners. By agreeing in principle how these interfaces will be managed and monitored you can help to reduce the cost of measures by avoiding delays and abortive work in later stages.

Engaging with partners

Make sure you have the right people on board. The decision support tool accompanying this guidance provides a starting point. Consider internal stakeholders as well as external ones. Review partnership as the LFRMS develops; there may be organisations or individuals outside the core partnership whose support could increase or strengthen funding opportunities, e.g. Councillors with interests in relevant areas may be offer valuable political support. Identify your RFCC representative(s) and ensure they are bought into the process so that they understand and promote locally significant measures, as the RFCC is a gatekeeper for FDGiA and Local Levy.

Be open with partners about your objectives and issues from the outset, and invest time in understanding those of others. Feedback from partners on the Isham Surface Water Scheme highlights the importance of openness and of clearly defined, common objectives in minimising delays and extra costs later. Make objectives 'SMART' to encourage achievements to be monitored and celebrated.

Ensure that the roles and responsibilities of all parties are clearly established to the satisfaction of all partners at this early stage. It is important that partners understand their roles, how these fit into the bigger picture and the consequences of reneging on their individual commitments.

Identify the level and type of engagement appropriate for each stakeholder (e.g. provide information, invite to some or all partnership/project meetings, or invite to workshops at specific points). How and when you engage with partners and the wider stakeholder group can be key to unlocking funding and/or contributions in kind.

Back to stages of LFRM

Practical advice for risk assessment stage

Communicating risk to maximise funding opportunities

How risk is communicated can be influential in accessing support and funding, for example ensuring that the those with political influence (e.g. Councillors and MPs) understand the probability and consequence of flooding can help to ensure prioritisation of LFRM and support for funding bids.

Water company funding for improvements is tested every five years against willingness to pay by their customers, Therefore, water company funding for local flood risk management activities may be more likely to be available if the potential risks of flooding are well communicated to their customers.

Understanding the location, scale, complexity and mechanisms of flooding within the area

Potential partners and funding sources may be identified depending on the type of flooding (e.g. fluvial, pluvial, groundwater, sewer flooding) and who/what would benefit from a reduction. Those responsible for flooding and the main beneficiaries of its reduction should be considered as likely potential partnership funders.

If there is any cross-boundary flooding into other local authority areas then these authorities may be able to offer support, information, funding or contributions in kind to achieve mutually beneficial solutions. Offering to work together with these authorities can reduce the overall cost of measures through efficiencies such as avoiding duplication and making the most of each others' relevant strengths.

Maritime authorities have coastal erosion responsibilities and should investigate the inclusion other relevant groups such as coastal protection trusts. Volunteer support from such organisations can be an excellent way to manage long term maintenance and reduce costs, as in Bucklebury Flood Alleviation Scheme.

Understanding the consequences of flooding

Understanding the consequences of flooding is important in identifying potential partners and funding sources. The value of reducing these consequences is a key factor in the cost benefit appraisal of measures which is used to justify investment. Consider not only people and properties immediately affected, but also what is going on in the wider area (e.g. regeneration, heritage projects, new development) as this can open up wider funding opportunities.

In order to motivate organisations ,individuals and community groups to participate in, and potentially contribute to, LFRM it is important to 'sell' the benefits in terms of their own relevant business drivers, for example by demonstrating to a water company that proposed measures will help to remove properties from their DG5 sewer flooding register (refer to Chapter 3, partners, for more information on partners' motivations and business drivers).

There may also be less tangible benefits which could help to motivate potential partners, for example: opportunities to enhance their image locally by sponsoring schemes; increasing tourism revenue by creating LFRM solutions offering multiple benefits (nature reserves, fishing, watersports); or reducing healthcare costs by enhancing the quality of life for residents through LFRM measures such as SuDS which offer urban greening opportunities.

Practical advice for options assessment stage

Anticipating and bridging potential funding gaps

As well as leveraging additional funding there may be other ways of enabling measures to proceed which are a local priority but unlikely to attract adequate funding. Consider reducing the cost of measures by finding efficiencies, changing the approach, and/or obtaining contributions in kind. Collaboration can help by opening up opportunities such as more cost efficient procurement routes or access to alternative construction methods.

Seek opportunities for improving the benefit cost of measures which are likely to be under-funded (either decreasing costs or increasing benefits) by sharing costs amongst partners, piggybacking on partners' existing projects and working with volunteer organisations.

Seek opportunities for linking in with other projects and initiatives within the area, for example Lottery heritage projects, regeneration schemes, government initiatives. By broadening out a solution to link in with other local initiatives it may be possible to share resources enabling both parties to offer increased benefit cost ratios for limited additional commitment.

Identifying potential measures

Look at the whole basket of measures available, including non-capital solutions such as educating the public and promoting individual responsibility.

Work closely with partners to identify and drive forward the most cost beneficial and sustainable solutions, without being confined by individual partners' funding or operational constraints. Include measures which are already programmed by other parties (e.g. in water company AMP plan or Environment Agency Medium Term Plan) where relevant, to ensure that these are taken into account in the overall strategy.

Selecting preferred measures (including cost benefit appraisal)

Ensure that all stakeholders are engaged in this process from the early stages in order to engender trust and facilitate buy-in. Use a fair and transparent selection process. This will help ensure that partners and the wider stakeholder group are committed to successful delivery of the selected measures and more prepared to contribute.

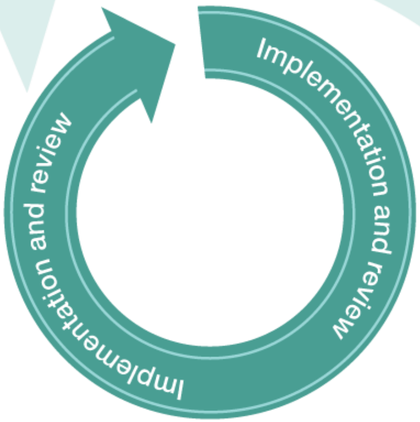
Ensure appropriate value is attributed to the wider benefits of LFRM measures, e.g. water quality and biodiversity improvements, public open spaces, community facilities, health and social welfare, cultural and heritage enhancements – measures which offer wider benefits increase the chances of leveraging funding and other contributions from a wider range of sources.

Consider whether additional benefits can be offered as part of proposed measures, for example habitat creation to extend/enhance a nearby protected site, which could help to draw in funding from alternative sources. The improvement in funding potential gained by increasing the cost benefit ratio of proposed measures in this way can significantly outweigh any additional costs.

Whilst options should not be ruled in or out on the basis of likely availability of funding, it is important to consider this issue from the outset. Include within the evaluation of options a criterion for "fundability", with an appropriate weighting, so that this factor can be considered as part of the overall appraisal. Schemes which have limited potential to leverage adequate funding may still be deliverable if they form part of a balanced range of measures which includes others that have the potential to attract greater than 100% funding.

Back to stages of LFRM

Practical advice for implementation and review stage



Obtaining and retaining the commitment of all partners

Risk Management Authorities must act consistently with the LFRMS. Assurances or agreements of some form are recommended with regard to other partners with delivery or funding responsibilities.

Consider asking partners to sign up to formal agreements or statements of intent to comply with the LFRMS.

Where actions are the responsibility of other organisations these should be programmed into their investment plans to maximise the likelihood of funding and resources being available. For example, water and sewerage companies' AMP programmes are set on a 5 yearly cycle so the earlier they are aware of their LFRMS actions the more likely these are to be funded.

If certain measures are not currently viable due to partners' other commitments, availability of funding or other reasons, but have been identified as part of the long term plan, these should be scheduled as future work and actions required to enable their future progression should be programmed into the action plan.

Allocating responsibility for actions to offer maximum cost efficiency

Ensure actions are owned by the most appropriate organisation or individual – i.e. the party or parties with the necessary skills, knowledge and authority to deliver them.

Identify and proactively manage interfaces between delivery partners to ensure that tasks are not delayed or their value reduced as a result of other parties not delivering against their actions.

Where more than one party is responsible for a particular action, encourage the relevant parties to establish a separate agreement or sub-programme for progression of that action.

Ensure that the consequences of non-delivery are expressed in a way that can be appreciated by all partners.

Preparing a realistic action plan

Make allowance for partners' investment cycles within the programme – these will affect the delivery timescale for any measures for which they are responsible as well as any which are dependent upon partners' contributions

Timetables for funding sources vary so where measures are reliant upon particular funding sources then this should be built into the programme of delivery. Track application dates for any funding sources identified as potentially viable to ensure windows of opportunity are not missed.

Careful consideration should be given to the order in which measures are programmed. For example if scheme A is required before scheme B, but scheme B funding is available first and needs to be spent within a certain period this incompatibility could compromise delivery of both schemes.

Consider whether the necessary resources are available within the local flood risk partnership to achieve the measures identified, or whether additional resources will be needed – if so include within the action plan proposals for building the necessary capacity in time to deliver each partners' commitments.

Back to stages of LFRM

Chapter three - partners

Chapter objectives

This chapter is intended as a resource for Lead Local Flood Authorities to help maximise their chances of identifying and realising opportunities for partner contributions to local flood risk management. It provides:

- Summary information on a range of stakeholders in local flood risk management
- More detailed information on the role, relevant expertise, drivers and investment cycles of those stakeholders considered most likely to contribute to the technical and/or financial delivery of local flood risk management

It is recommended that the information contained within this section should be reviewed regularly and updated as appropriate to reflect future changes.

Chapter contents

Introduction

There are numerous stakeholders in LFRM, some of whom are core partners who should be involved from the outset in any LFRM work, and some of whom may be more relevant to specific types of measure and/or particular stages of LFRM. This chapter provides an overview of the organisations most likely to be potential partners in local flood risk management, including their role, potential drivers for involvement, and associated potential funding sources.

The information contained in this chapter is intended to provide a resource for use by Lead Local Flood Authorities to support the development and delivery of Local Flood Risk Management Strategies. Having a good understanding of what motivates other organisations to participate in local flood risk projects and how they are funded for this will help LLFAs build stronger local partnerships and improve their chances of obtaining contributions from partners. Different partners bring different skills, knowledge and capabilities to the table so a fuller understanding of what these are will help enable LLFAs to identify when and how different organisations can contribute.

Structure

The information in this chapter is structured in tabular form. The first table (from 3.4) provides summary information on the risk management authorities and other potential partners with regard to their role in LFRM, motivations for partnering and associated potential funding sources. The following tables (from 3.11) contain details of the role, motivations, expertise and investment cycles of the core partners and (based on current knowledge) most likely potential funding partners. The information contained in this chapter is not exhaustive. It is acknowledged that individual circumstances can vary widely; other types of organisation may have a role to play and this should be determined on a case-by-case basis. The Surface Water Management Plan Technical Guidance provides information on the roles that different organisations may have in flood risk management and how partnerships can be established, solutions investigated and action plans taken forward.

Core partners

The core partners in LFRM are those identified as **risk management authorities** under the Flood and Water Management Act 2010 (FWMA section 6, part 13):

- 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

These organisations all have assets or flood risk management responsibilities and are therefore the most likely potential partners in developing schemes. They have a direct interest in LFRM and their involvement should be sought from the earliest possible stages of planning and strategy, preferably in the form of a local flood risk partnership. They may be able to offer access to potential sources of funding and/or contribute in non-financial ways, for example by:

- contributing their expertise and knowledge
- sharing information
- providing information on relevant aspects of their own future investment plans and priorities
- co-ordinating aspects of their own work to help achieve scheme objectives
- sharing risk
- allowing works to take place on their land

Such contributions are extremely valuable in their own right and should not be underestimated or overshadowed by the need for direct funding contributions.

'Contributions in kind' can help to reduce the overall cost of a scheme and thus make available funding go further. The web survey results indicated that although actual partnership funding of LFRM has been limited to date, most local authorities are already collaborating with core LFRM partners in non-financial ways.

As a general note on motivations, all the risk management authorities listed above have a responsibility under the FWMA to act consistently with the National FCERM Strategy prepared by the Environment Agency. As the LFRMS must be consistent with this, contributing to meeting the objectives of the LFRMS through partnership working will help them to fulfil this requirement.

Wider stakeholder group

There may be any number of additional stakeholders outside the core risk management authorities under FWMA. Who these are will depend on the nature of the LFRM work (high level strategic planning or scheme specific detailed design, for example), the flood risk locations and mechanisms identified, the types of options proposed and other factors. To help identify stakeholders the following categories may provide a prompt. Broadly speaking stakeholders are those who:

- hold relevant assets or data;
- have relevant duties and powers;
- control or act as gatekeepers for potential funding sources;
- stand to benefit from LFRM measures;
- may be disadvantaged as a result of LFRM measures; or
- have an indirect interest in the outcomes of LFRM measures.

Additional stakeholders may be identified at any stage during LFRM planning and delivery, as new information or more detailed understanding of the issues and options emerge. It is important that all affected parties are identified so the stakeholder list should be reviewed regularly or at key stages in the development and implementation of the LFRMS and resultant schemes.

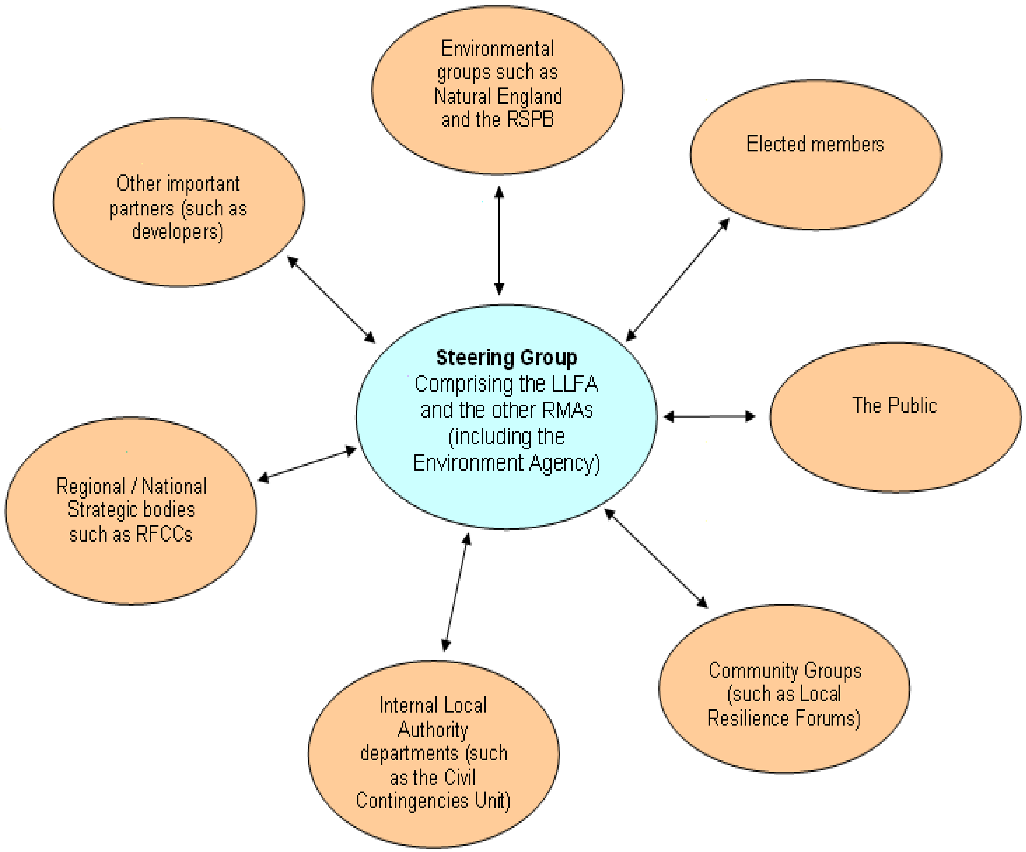


Figure 2.1: Example partnership structure based on LFRMS e-learning module; EA website

Introduction to partner summary tables

The tables on pages 3.5 to 3.10 inclusive provide summary information on the core partners listed on page 3.2 as well as other potentially interested organisations (partners, funders and influencers) which may form part of the wider stakeholder group and hence about whom it would be beneficial for LLFAs to be informed. The tables cover:

- Lead Local Flood Authorities
- Environment Agency
- District councils (within local authority section)
- Internal Drainage Boards
- Water and Sewerage Companies
- Highway Authority (within local authority section)
- Regional Flood and Coastal Committees (not a direct partner but a gatekeeper for FDGiA and local levy funding)
- Highways Agency
- Network Rail
- Natural England
- NGOs, private landowners/community groups/trusts
- Forestry Commission
- Parish and Town Councils
- National Farmers Union
- Other utilities companies
- Waste management organisations
- European Union
- Local Economic Partnerships and/or local Chambers of Commerce
- Association of British Insurers (not likely to be actively involved but a potential influence on developers' willingness to contribute)

Partner summary tables – an introduction to the organisations most typically relevant to local flood risk management

		Role in LFRM	Motivations for collaborative working	Associated potential funding sources for LFRM
Local Authorities	…as Lead Local Flood Authority and SUDS Approval Body	• Lead on the management of local flood risk • Maintain register of assets • Flood incident reporting • Consenting and enforcement of works on ordinary watercourses (when commenced) • Responsibility for civil contingencies (emergency planning) • (Will be) SUDS Approval Body • Risk management authority under the FWMA • Emergency planning • Producing Local Flood Risk Management Strategy	• Access to technical expertise and data • Obtain funding contributions from other stakeholders and beneficiaries • Reduced timescales for scheme delivery • Reduced objections from other stakeholders and beneficiaries • Opportunities to save costs by 'piggybacking' LFRM schemes with third party projects (e.g. retrofit SUDS and highways projects) • Overall responsibility to manage local flood risk • Reduce flood risk to communities and businesses • Enabling local choice (Localism Agenda)	• FDGiA • Local Levy • Occasional Defra initiatives • Council tax • Government grants • Redistributed non-domestic rates (business rates) • Income from borrowing and investments • Other internal sources of revenue relating to non-LFRM activities which could potentially be accessed for relevant aspects of LFRM projects
	…as Land Drainage Authority (Includes all relevant tiers)	• Maintain and undertake works powers on ordinary watercourses • Risk management authority under the FWMA	• Access to technical expertise and data • Reduced timescales for scheme delivery and collaboration where ordinary water courses involved. • Access to funds through Revenue Support Grant.	• FDGiA • Local Levy • Council tax levy / precept for activity in risk management activities for ordinary watercourses
	…as highways authority	• Drainage authority for highway runoff • Co-operate with LLFA • Risk management authority under the FWMA	• Represent interests in decision-making • Reduce drainage costs by sharing schemes with other interested parties	• Council tax • S106 agreements with developers
	… as planning authority	• Ensure no inappropriate development in areas at risk of flooding • Ensure development does not create areas at risk of flooding • Co-operate with LLFA • Emergency planning • Develop Strategic Flood Risk assessment	• Ensure that LFRM decisions support local needs for economic and housing development, and vice versa • Prevent unnecessary flood risk management costs • Protect critical infrastructure from flood risks • Ensure appropriate developer contributions to future flood risk management activities and operation and maintenance of drainage features	• S106 agreements with developers • Community Infrastructure Levy • New Homes Bonus • Regional Growth Fund

	Role in LFRM	Motivations for collaborative working	Associated potential funding sources for LFRM
Environment Agency *(list of roles not exhaustive but main roles are identified)*	• Strategic overview of coastal erosion and flooding from all sources • Implement government policy on flood risk • Producing a national FCERM strategy for England • Develop catchment flood management plans and shoreline management plans • Championing a catchment and coastal cell approach • Responsible for management of flood risk from Main Rivers and the Sea • Protect the environment • Promotion of more efficient use of resources (e.g. storm water harvesting) • Climate change adaptation • Co-operate with LLFA • Report about the management of all sources of flood and coastal risk • Risk management authority under the FWMA.	• Efficiencies in the delivery of schemes to manage flood risk • Early sight of proposals making it easier to ensure LFRM decisions are aligned with government policy and reducing the need to object to proposals (and hence time and administration costs) • Integrating local flood risk management with management of flood risk from Main Rivers and the Sea – promoting a catchment and coastal cell approach • Ensure more cost effective use of grant in aid funding by encouraging contributions from other beneficiaries to appropriate schemes • Reduced timescales for scheme delivery	• FDGiA • Local Levy • Occasional Defra initiatives
Internal Drainage Boards (IDBs)	• Responsible for maintenance, improvement and operation of drainage systems • Regulation of watercourses apart from the main rivers • Manage the level of watercourses • Co-operate with LLFA • Risk management authority under the FWMA	• Represent interests in decision-making • Ensure appropriate contributions from other parties for maintenance and upgrade of IDB assets affected • Reduced costs due to less water from land drainage as a result of investment elsewhere	• Council tax precept (Special Levy) • Contributions/rates from local landowners • FDGiA
Water and Sewerage Companies	• Responsible for maintaining sewers carrying surface water away from impermeable surfaces, and that the contents of the sewers are managed appropriately • Responsible for management and operation of foul sewerage system (often this also includes surface water) • Protect water quality (e.g. pollution from combined sewer overflows) • Co-operate with LLFA • Responsible for maintaining other services to customers (e.g. water supply) • Risk management authority under the FWMA	• Meet Ofwat targets and achieve similar or better outcomes for less cost • Inform 25 year investment plans • Reduce whole life costs by considering a wider range of options outside own strictly regulated area of responsibility • Reduce sewer flooding (DG5) • Decrease pressure on existing sewer networks • Maintain/improve standard of service to Customers	• Capital and operational budget funded by customer rates determined by Ofwat rates and connection charges

	Role in LFRM	Motivations for collaborative working	Associated potential funding sources for LFRM
Regional Flood and Coastal Committees (RFCC)	• Provide supervision of the Environment Agency's role • Guiding the Environment Agency's flood and coastal erosion risk management activities in their region • Have the final say on implementation of the programme of works brought forward by the Environment Agency for their region (after appropriate discussions) • Responsible for raising the local levy, which enables additional schemes to be funded at a regional level. • Decide how the local levy, and other funds raised locally (such as general drainage charges and contributions from internal drainage boards and others) will be spent	• Achieving greatest possible return on public investment • Maximise impact of available resources through match funding	• FDGiA • Local Levy • Other locally raised funds
Highways Agency	• Responsible for drainage of motorways and trunk roads • Co-operate with LLFA	• Minimise damage to assets • Represent interests in decision • Reduce drainage costs by sharing schemes with other interested parties • Keep road network functioning	• Central Government funding for maintenance of the core road network
Network Rail	• Responsible for managing flood risk to its railways and stations • Co-operate with LLFA	• Represent interests in decision-making • Protect assets and customers • Avoid costs associated with line closure due to flood damage • Minimise cost of suspending services due to flooding • Forewarning of assets at risk from future flooding	• Capital and operational budget funded by customer charges regulated by the Office of Rail Regulation, and revenue from assets

	Role in LFRM	Motivations for collaborative working	Associated potential funding sources for LFRM
Natural England *(Countryside Council for Wales in Wales)*	• Responsible for advising EA on potential impact of proposed activities falling under the Environmental Permitting Regulations on the integrity of European designated sites • Specific duties relating to the authorisation of operations likely to damage SSSIs, provided by the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)	• Influence decision-making • Ensure that LFRM schemes contribute to protection and enhancement of designated sites • Ensure wider picture taken into account re habitat creation opportunities, supporting particular species, protecting and enhancing ecosystems • Contribute to achievement of corporate performance indicators	• Government grant in aid
NGO's, private landowners, community groups/trusts	• Responsible for flood risk management on their own land • Beneficiaries of LFRM schemes	• Influence proposals • Raise funds to make schemes happen • Protect land and property • Forewarning of areas at risk from future flooding (e.g. climate change) • Support organisation's or group's wider objectives	• Private/community donations • Lottery funds • Various grants and charitable funds • Government funding (NGOs)
The Forestry Commission and National Parks	• Responsible for the protection and expansion of Britain's forests and woodlands and national parks	• Protect and enhance existing sites and create new areas as part of LFRM schemes	• Revenue from assets, grants, charitable donations – NGO

	Role in LFRM	Motivations for collaborative working	Associated potential funding sources for LFRM
Parish and town councils	• General powers to assist LLFA • Provide links with local communities • Help co-ordinate flood preparation and response, galvanise local communities into action, co-ordinate communications	• Represent interests of local communities • Ensure local concerns are taken into account within LFRM	• Council tax levy (precept)
National Farmers' union	• Protect members' land and property • Represent members interests • Co-ordinate members' participation in LFRM	• Protect members' land and property • Represent members' interests in decision-making • Provide members with forewarning of areas at risk from future flooding (e.g. climate change)	• Private donations from members (private beneficiary funding)
Other utilities companies	• Responsible for maintaining supply to customers • Co-operate with LLFA	• Represent interests in decision-making • Protect assets • Keep customers satisfied and avoid claims relating to suspension of service due to flood damage • Avoid costs due to flood damage • Forewarning of assets at risk from future flooding (e.g. climate change)	• Capital and operational budgets funded by customer rates
Waste man'ment organisations	• Protect sites and assets from flood risk • Protect flood risk and water pollution from sites	• Protect sites • Reduce risk of leachate penalties • Forewarning of areas at risk from future flooding (e.g. climate change) to inform site location decisions and flood risk management measures	• Landfill Community Fund • Private beneficiary funding
European Union	• Potential funding sources (e.g. RDF) • Regeneration of urban watercourses • Protect water quality and the environment	• Improved compliance with Floods Directive • Facilitates compliance with Water Framework and other relevant Directives	• EU grants

	Role in LFRM	Motivations for collaborative working	Associated potential funding sources for LFRM
Local economic Partnerships and/or local Chambers of Commerce	• Conduit for funding (e.g. EU) • Manage funding contributions • Help co-ordinate public and private sector involvement • Represent local economic interests	• Ensure that LFRM decisions support local needs for economic development • Prevent unnecessary flood risk management and defence costs • potential beneficiaries	• EU grants • Government funding
Association of British Insurers	• Provide insurance for flood damage and associated costs	• More accurate risk valuation • Reduced damages payouts and associated administration costs • Improved reputation (able to offer more consistent messages to customers)	• N/A
Developers	• Ensure development does not increase flood risk • Protect development from flood risk	• Release land for development • Realise full development potential of land • Increase likelihood of planning approval • Speed up schemes	• SI06 • CIL

Introduction to detailed partner information tables

The tables on pages 3.12 to 3.24 present more detailed information on the potential partner organisations considered most likely to be directly involved in the collaborative delivery of flood risk management, by:

- Providing resources in kind, in the form of data and/or staff time
- Directly contributing financially
- Co-ordinating aspects of their own work to help achieve LFRM objectives

The information provided is intended as a resource to help LLFAs seeking to engage and negotiate with these organisations. Information is included on the role, expertise, business drivers and investment cycles of these organisations so that LLFAs can gain a rapid overview of the salient information with respect to motivating them to contribute to LFRM.

It may be appropriate to seek the engagement of other stakeholders depending on specific circumstances and on a case-by-case basis.

Organisations about whom detailed information is provided in the following tables:

Local Authorities (1)

Role in LFRM	Unitary Authorities and County Councils have a new role as the Lead Local Flood Authority (LLFA) under the FWMA. The LLFA has particular responsibility for developing a strategy (FWMA Section 9) for local flood risk management in its area for surface runoff, groundwater and ordinary watercourses; however, as well as managing and investing in local risks it may be beneficial for local authorities to address all forms of flood risk (including investing in rivers or coastal management schemes) where this is seen as a local priority. This could be done either directly within the LFRM Strategy, or in a Local Investment Plan which could sit alongside or within the LFRMS. This approach could help to leverage funding since under Defra's new partnership funding approach it is possible to seek contributions against all schemes being progressed so increasing the range of schemes included is likely to result in greater contributions and also a fairer overall distribution of costs. Such an "all risks" investment plan may not be required everywhere – it would depend on the sorts of risk in the area and the appetite and capacity of the LLFA to bring this sort of approach together. Under the FWMA the LLFA also has a duty to co-operate with other flood risk management authorities (Section 13), to investigate flooding in its area '*to the extent that it considers it necessary or appropriate*' (Section 19,), to maintain a register of structures or features likely to have a significant effect on flood risk in their area (Section 21) and powers to request information in connection with their flood and coastal erosion risk management functions (Section 14). The local authority as the Highway Authority is a risk management authority under the FWMA (Section 6(13)) due to the importance of highway drainage to managing flood risk. In 2-tier systems, district councils as planning authorities could be instrumental in the successful implementation of schedule 3 (Sustainable Drainage) of the FWMA. Skills and capacity building for the new flood risk management roles in FWMA is an important development area for local authorities. Defra, the Environment Agency, local government representative and the LGA developed a Capacity Building Strategy in 2010 and a programme of skills and capacity building started in January 2011.
Key areas of relevant expertise	Technical knowledge and expertise on ordinary watercourses, coastal erosion and highway drainage. Historical records. Relationships with other potential partners. Experience in establishing collaborative working and partnership funding arrangements which are transferable from other parts of the local authority to flood risk management. Procurement experience and access to procurement routes for capital schemes which could offer efficiency savings.
Relevant business drivers	Local authorities operate under a wide range of legislative requirements. Priorities are established by Elected Members of the councils, supported and informed by officers and local flood risk management will have to compete with many other demands for service provision. Local community and business opinion can have a significant effect on priorities. The development of sound business cases for flood and coastal erosion risk management actions can provide crucial evidence to gain support for allocation of funding. Local authorities' other responsibilities outside the field of flood risk management (e.g. social health and welfare, economic growth, spatial planning, environmental improvements, etc) will all influence their perspective.

Local Authorities (2)

Investment cycles

General funding is set by the Department for Communities and Local Government (DCLG) following the government's 4-yearly comprehensive spending review – the 2010 review set funding for 2011/12 to 2014/15.

Local authorities typically begin preparing their capital and revenue estimates in September/October for the financial year commencing the following 1 April. Central Government's contribution is usually confirmed in December, and budgets are prepared which go to the Policy & Resources Committee and/or the Finance Committee for approval and submission to the full Council in February/March. The specifics of this timetable are likely to vary between areas.

To enable a council to include specific capital projects in its budgetary planning, detailed information would be required the previous summer/early autumn. Applications for small grants towards revenue expenditure can normally be made in writing at any time of year but an application at the beginning of the financial year is likely to stand more chance of success. A rolling programme or priority system may be in place covering several years, which can be amended annually to adapt to changes in circumstances or local priorities (www.parishresources.org.uk).

Additional information

Defra provides (non ring-fenced) funding to local authorities through DCLG for flood and coastal erosion risk management through the Revenue Support Grant and Local Services Support grant allocations (previously known as Area Based Grant).

Local authorities also have access to other sources of funding to support activities that are often linked to flood risk management measures, for example creation/enhancement of public open spaces and improving access to the environment. Offering wider benefits as part of LFRM schemes can enable local authorities to justify investment under include their well-being powers, for example, or to draw on Planning Obligations funding, both of which have been used successfully to help fund flood risk management projects (see Bourne Valley Park case study).

Local authority spending can be split into two categories: revenue and capital spending. Revenue spending is the cost of running services during the financial year (e.g. salaries, heating, lighting, and cleaning), as well as products and services used during the year. Capital spending refers to money spent on buying, constructing or improving assets such as roads, buildings and vehicles. Revenue and capital spending are usually funded in different ways. Revenue funding is used for planning and risk assessment activities associated with LFRM, but when it comes to the delivery stages where assets are being created then funding would be capitalised; in which case it can be rolled over across more than one financial year.

Environment Agency

Role in LFRM	The Flood and Water Management Act 2010 ("the 2010 Act") gives the Environment Agency a leadership role in dealing with flood and coastal erosion risk. The Environment Agency has the role of implementing government policy on flood risk, and has a strategic overview of coastal erosion and flooding from all sources. It has responsibilities for its flood defences and powers and duties relating to the drainage, maintenance and operations of the main rivers. Its overall aim is to manage the risk of flooding from main rivers and the sea. The Environment Agency has a duty to produce flood risk maps for main rivers and the sea, and a power to issue flood warnings. It is also a statutory consultee to the development planning process and certain planning applications that affect its interests. The Environment Agency provides capital funding for new and improved flood risk management projects and defences delivered by itself, by local authorities and by Internal Drainage Boards.
Key areas of relevant expertise	Technical knowledge and expertise on main rivers and associated flood defences. Historical records. Relationships with other potential partners. Extensive experience in establishing collaborative working and partnership funding arrangements for flood risk management. National perspective. Procurement experience and access to procurement routes for capital schemes which could offer efficiency savings. The Environment Agency worked with Defra, local government representative and the LGA to develop a Capacity Building Strategy in 2010, and as part of this a programme of skills and capacity building within local authorities was commenced in January 2011.
Relevant business drivers	The Environment Agency is a risk management authority under the FWMA. It must develop, maintain, apply and monitor a strategy for flood and coastal erosion risk management in England (a "national flood and coastal erosion risk management strategy"). Statutory responsibilities and public accountability.
Investment cycles	Funding is set by Defra following the government's 4-yearly comprehensive spending review – the 2010 review set funding for 2011/12 to 2014/15.
Additional information	Statutory and financial accountability concerns. The Environment Agency has a responsibility to ensure that schemes funded by itself offer value for money for the tax payer, based on benefit-cost appraisal.

Internal Drainage Boards

Role in LFRM	Internal drainage boards (IDBs) have a general supervisory role relating to drainage of land within their district and were set up historically in areas which would derive benefit or avoid danger, as a result of drainage operations. The IBDs current role is largely set out in the Land Drainage Act 1991 although their origins go back to much earlier legislation. In 2010 there were 154 IDB districts in England and 15 in Wales (2 IDBs cross the border). IDBs cover 1.2 million hectares of England (9.7% of the total land area of the country) and 28,500 hectares of Wales (1.4% of the total land area of the country). Much of their work involves the maintenance of rivers, drainage channels (rhynes, ordinary watercourses, pumping stations facilitating drainage of new developments, the ecological conservation and enhancement of watercourses, monitoring and advising on planning applications and making sure that any development is carried out in line with legislation (PPS25 or whatever replaces this within the New Planning Policy Framework). IDBs are not responsible for watercourses designated as main rivers within their drainage districts as the supervision of these watercourses is undertaken by the Environment Agency. Under the FWMA2010 IDBs are Risk Management authorities. LLFAs are expected to have close working partnerships with IDBs in their areas. Within IDB districts only IDBs will have works powers on watercourses under their management so it will be important to work together.
Key areas of relevant expertise	Considerable technical knowledge and expertise in land drainage and flood risk management. IDBs employ experienced drainage engineers, other specialists and operatives. In some areas this expertise may also include coastal erosion risk management. Historical records. Relationships with other potential partners. Experience in establishing collaborative working and joint funding arrangements.
Relevant business drivers	Historically Internal Drainage Boards were set up primarily for the benefit of the drainage of agricultural land and farmers' and landowners' requirements still have significant influence over drainage operations. Under the Land Drainage Act 1991 Schedule 1, IDB members are elected and drawn from occupiers of agricultural/horticultural land in excess of 4 hectares together with representatives being appointed by relevant district councils. Communities and businesses in IDB areas and have an interest in how drainage is managed. IDB areas are typically lowland in nature, or originally wetlands and there are strong environmental interests concerned with maintaining and improving biodiversity. In some areas environmental organisations own land and seek to ensure that drainage operations are beneficial to biodiversity.
Restrictions and concerns	IDBs are funded through the drainage rates and special levies on agricultural land and properties in their district paid annually to the IDB. IDBs can also apply to the Environment Agency for capital money through FDGiA. For the purposes of rating, properties are divided into: • Agricultural land and buildings • Other land (such as domestic houses, factories, shops etc)

Water and sewerage companies (1)

Role in LFRM

Water and sewerage companies (WASCs) play an important role in local flood risk management. Their sewer networks provide drainage for a significant proportion of rainfall, particularly that falling in urban areas. Section 94 of the **Water Industry Act 1991** (WIA91) (as quoted below) effectively sets out a flood risk management function for WASCs. It imposes a duty to 'effectually drain' their areas of responsibility. They also have a responsibility to resolve sewer flooding affecting properties (with regard to company-specific targets agreed with their regulator, Ofwat).

Section 94 WIA91 - General duty to provide sewerage system (http://www.legislation.gov.uk/ukpga/1991/56/contents).
(1) It shall be the duty of every sewerage undertaker—

> *(a) to provide, improve and extend such a system of public sewers (whether inside its area or elsewhere) and so to cleanse and maintain those sewers [and any lateral drains which belong to or vest in the undertaker] as to ensure that that area is and continues to be effectually drained; and*
>
> *(b) to make provision for the emptying of those sewers and such further provision (whether inside its area or elsewhere) as is necessary from time to time for effectually dealing, by means of sewage disposal works or otherwise, with the contents of those sewers.*

The Section 94 duty to effectually drain applies to surface water and foul water. Surface water in the WIA91 is defined as water from roofs and yards (the curtilage of buildings). Sewers under the responsibility of WASCs can contain surface water, foul water, or a combination of the two. In some circumstances sewers will also contain other types of drainage water such as highway drainage for historical reasons. Since 1991 - under Section 115 of the WIA91 WASCs can enter into arrangements with highway authorities so that sewers convey highway drainage.

Under the **Flood and Water Management Act 2010** (FWMA) WASCs have the following duties :
Section 11(1) (a) *In exercising a flood or coastal erosion risk management function in relation to an area in England, a water company must - act in a manner consistent with the national strategy and guidance.*
Section 11(3) – *In exercising a flood or coastal erosion risk management function in relation to an area in England, a water company must have regard to the local strategies and guidance.*
Section 13, part 1 – *A relevant authority must co-operate with other relevant authorities in the exercise of their flood and coastal erosion risk management functions*
Section 14 – enables the Environment Agency and the lead local flood authority to request information of persons (including WASCs) in connection with their flood and coastal erosion risk management function. This may mean that they need to provide information about the sewerage system to other risk management authorities under FWMA even if this would not directly benefit the sewerage system.

Key areas of relevant expertise

Technical knowledge and expertise relating to drainage and water quality, as well as demand management (which can play a part in surface runoff reduction e.g. by reducing external use of water, encouraging stormwater capture and recycling, etc). Historical sewer records, flooding records, hydraulic models and drainage area plans. Relationships with other potential partners. Procurement experience and access to procurement routes for capital schemes which could offer efficiency savings.

Water and sewerage companies (2)

Relevant business drivers

- WASCs must act in a manner which is consistent with the National FCERM Strategy and guidance, and have regard to the LFRMS and local guidance, when exercising their functions under section 94 Water Industry Act 1991 in relation to surface water and combined sewers [s11(1) & (3)]. In exercising any other function in a manner which may affect a flood risk a water company must have regard to the national and local strategies and guidance [s11(4)]
- WASCs must co-operate with other relevant authorities e.g. local authorities and Agency, in the exercise of their functions under section 94 Water Industry Act 1991 in relation to surface water and combined sewers [s13].
- WASCs are required by Ofwat to deliver the schemes that provide the greatest benefit to customers at the least cost. If a water company expects that collaboration will lead to efficiency either now or in the future this will motivate it to be involved. They are subject to high level targets set by Ofwat, and have the freedom to interpret how they operate providing that they continue to meet these targets. As part of creating their 5 year business plans, WASCs consult with Ofwat and other stakeholders and regulators about desired investments. Investment proposals put forward must fall into one of the funding streams stipulated by Ofwat – Base Maintenance, Quality, Supply and Demand, and Enhanced Levels of Service.

DG5 Register

Currently the key target of relevance to LFRM relates to the removal of properties from the DG5 sewer flooding register. Not all properties with sewer flooding meet the criteria necessary to appear on this register; only internal flooding of properties caused by overloaded sewers during a rainfall event not exceeding 1 in 30 years is included. In their AMP5 programme WASCs will be focused on removing properties from their DG5 registers through delivery of capital schemes or other solutions,. The number of properties to be removed is defined by Ofwat as 'outputs', reducing or preventing the occurrence of sewer flooding in non-DG5 properties (although clearly beneficial to the customers in question) does not count towards their objectives and they are not funded to do so. Where an LFRM scheme offers opportunities to remove properties from the DG5 register this is likely to offer the best potential of obtaining joint funding from the relevant water company. However, other justifications for involvement can be made, for example if a LFRM scheme could offer cost savings to the water company by reducing flow to the sewer and hence reducing treatment costs; particularly if this were to remove the need for a significant investment such as a major treatment works upgrade.

Other drivers

WASCs are not currently incentivised to invest in assets outside their regulated asset base. This is because they do not benefit from any return on these assets as the expenditure is not capitalised and there is no increase in their Regulatory Capital Value. This means that to persuade them to invest in non-sewered drainage solutions it must be demonstrated that there is a benefit to the water company's customers (or its own financial interests outside its regulated industry) from investing in these third party assets. This is gradually changing as WASCs are becoming more willing to adopt sustainable drainage systems under certain circumstances. As long as WASCs' work is linked to improving the performance of the sewerage system (ether short or long term) then it falls within the regulatory duty of S94 WIA 1991.

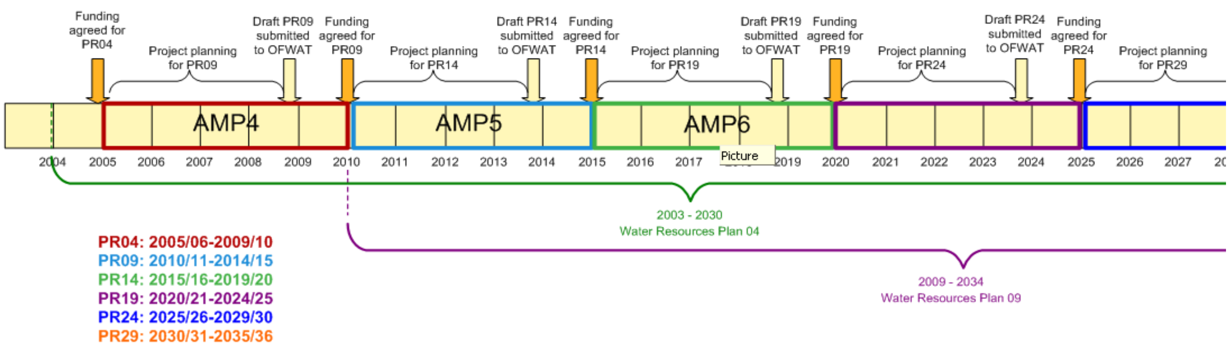
Ofwat is also currently reviewing how it can improve companies' incentives to deliver sustainable sewerage services to customers and promote innovation. Ofwat is encouraging WASCs to undertake sustainable drainage pilot studies to deliver part of their AMP5 capital programme (around 5%), with the aim of promoting sustainable solutions, increasing stakeholder engagement and to increase learning. A number of companies are already progressing with sustainable drainage schemes, focusing on areas such as surface water reduction and working with stakeholders including local authorities.

Water and sewerage companies (3)

Investment cycles

WASCs have several options for financing improvements to the water services infrastructure. The main route is through the water company's capital programme, which runs in five year Asset Management Plan (AMP) cycles. We are currently in the AMP5 period (2010-2015). The diagram below illustrates the AMP cycle. In addition to, and perhaps more significantly than, their potential as a funding partner WASCs are likely to be involved in providing contributions in kind to support LFRM schemes, for example they are typically the most appropriate partner to undertake any sewer modelling since they have the relevant skills and data, and in this way can negate concerns about provision of network model data to external parties.

The 5 year planning and investment cycle to which WASCs are subject (see diagram below) can have implications for the timing of water company funded surface water flooding solutions, so it is important that WASCs are involved in the LFRM process from the earliest possible stage to ensure that the timing of aspects for which they are responsible can be managed appropriately. WASCs will begin the formal process of preparing their next submission to Ofwat, to determine their allowable capital expenditure for AMP6, in 2013; however, the planning for this is likely to have commenced already. Any request for a water company to contribute to LFRM works between now and 2020 would need to be raised as soon as possible to increase the chances of consideration. LLFAs should share data on flood risk problem locations with WASCs regularly, and should be seeking opportunities now to identify potential collaborative solutions for AMP6.



Additional information

Much of the relevant data held by WASCs is considered by them to be commercially confidential and/or financially sensitive, and in the past they have tended take a precautionary approach to provision of data. However, FWMA has placed clear responsibilities on WASCs for co-operation, and sets out a framework for doing this. In addition, Surface Water Management Plans (SWMPs) have now set precedents about information sharing arrangements. This is starting to bring results after initial delays. It should also be remembered that understanding network performance and service failure, now and in the future, is crucial to WASCs, regulators and the public. WASCs will be motivated by the fact that information sharing is essential in developing a shared understanding of risk and delivering environmental outcomes. As sewer flooding is under reported, the DG5 records alone do not give an accurate picture of flood risk from the sewer system. Adopting a risk-based approach to understanding performance and service failure across sewer networks will be important in the future. WASCs will be seeking to deliver sustainable, risk based, joint outcomes for water quality and flood risk, and this will require partnership working to realise maximum benefit-cost ratios. Effective engagement and information sharing will help cost effective joint solutions to be developed. This is likely to require detailed information regarding above and below ground systems so that a shared understanding of risk, integrated solutions and designing for exceedance can be developed in partnership.

Highways Agency

Role in LFRM	The Highways Agency (HA) is an Executive Agency of the Department for Transport (DfT), and is responsible for operating, maintaining and improving the strategic road network in England on behalf of the Secretary of State for Transport. It is responsible for the quantity and quality of runoff discharged from its 10,460km of trunk roads and motorway in England and Wales. The HA is a Risk Management Authority (RMA) as defined by the Flood and Water Management Act 2010 (F&WMA). There is a duty for the HA to co-operate when consulted by Lead Local Flood Authorities (LLFAs) in connection with their duties under the Act. HA drainage systems are managed to primarily maintain safety on highways and protect downstream receiving waters or drainage systems from flooding and pollution. New road or road-widening schemes that require the provision of new drainage systems are designed in accordance with prescribed design standards set out in the Design Manual for Roads and Bridges (DMRB). The HA is committed to adopting SUDS principles in their design standards. It is estimated that 10-15% of the HA asset base (by value) is drainage infrastructure (approximately £8billion). The HA is responsible for all bridges on the trunk road network, and other structures associated with those roads including drainage culverts and retaining walls. Operation and maintenance of the strategic road network is delivered through a series of private sector service providers comprising 12 (formerly 14) Managing Agent (MA) or Managing Agent Contractor (MAC) contracts and a similar number of DBFO (design, build, fund, operate) arrangements. The routine management, operation and maintenance of drainage systems are an inherent part of service provider contracts, governed by rules and standards set out in their contract documents.
Key areas of relevant expertise	The design (including impact assessment), construction, operation and maintenance of drainage systems (pipes, attenuation and sustainable drainage). Trunk road drainage infrastructure data and records. The HA also funds (both through its own budget and collaboratively with other agencies) research and development projects relevant to the assessment and mitigation of flood risk associated with highway infrastructure.
Relevant business drivers	The HA has a statutory responsibility to provide drainage for its road network described in the Highways Act (1980). Although it is exempt from requiring a discharge consent under the Water Resources Act, it has a statutory duty not to cause pollution of controlled waters. There is a Memorandum of Understanding (MoU) with the Environment Agency which identifies areas of common interest, collaboration and responsibility. The primary drivers of HA drainage are to address highway safety, to manage and control pollution risk from spillages and contamination in routine road runoff and to manage and control flood risk from highway drainage. While new infrastructure is provided to high standards (broadly equivalent to proposed National SUDS standards) significant legacy issues exist across the network. The MoU with the EA recognises the need, and measures necessary, to address these legacy drainage issues. These measures include a priority assets programme which focuses on those drainage systems that represent the most significant pollution and flood risk. Where trunk road or motorway runoff forms part of a surface water issue, or trunk roads and motorways are affected by local flood risk, collaboration with the relevant regional HA representative should be pursued; as a technical stakeholder and potentially also a funding partner. Three of the HA's five strategic goals for 2010-2015 are likely to have a bearing on their readiness to invest in LFRM schemes (www.highways.gov.uk/aboutus/documents/NPPD_Strategic_Plan_-_Final1.pdf : 3. We deliver sustainable solutions 4. Our roads are the safest in the world 5. Our network is a dynamic and resilient asset
Investment cycles	Funding is set by the Department for Transport following the government's 4-yearly comprehensive spending review – the 2010 review set funding for 2011/12 to 2014/15. Joint funding opportunities would be via local negotiation with the HA.

Highways Agency

Additional information

The DMRB standards preclude the connection of third party drainage into HA assets so that the HA maintains control over its own assets. Departures from these design standards are possible through negotiation. HA drainage assets are recorded through the (web-based) Highways Agency Drainage Data Management System (HADDMS). This provides not only a centralised repository of inventory and condition information collected by service providers but also provides access to a range of tools for the management of the HA drainage asset. These include tools related to flood risk (such as a Flood Register). Through commitments made to improve the quality of asset data, there have been significant recent improvements in HA drainage network mapping and asset inventories. Programmes of asset verification (such as CCTV surveys) and gathering condition information are all recorded on HADDMS. Asset inventory data (unverified) for nearly 80% of the network is now available, although there are considerable local variations and there is currently little condition data. To support the process of updating HA drainage asset records and increasing understanding of flood risk represented by their network, the HA requires its service providers to appoint a Drainage Liaison Engineer and "Flood Champion" to act as key points of contact for drainage matters and flood risk management. The role(s) include liaison with HA emergency planners and Local Resilience Forums. To encourage engagement and collaboration, local authorities should aim to demonstrate that HA assets are either causing, or are affected by, surface water flooding. Such collaboration is most likely to be achieved through the identification of common benefits, for example, through the delivery of a LFRM scheme. Joint funding opportunities would be via local negotiation with the HA.

Network Rail

Role in LFRM	Network Rail is a private sector monopoly owner and operator of the national rail network, including track, signalling, bridges, tunnels and stations.
Key areas of relevant expertise	Technical knowledge and expertise on stations, rail routes, culverts and bridge crossings. Historical records. Relationships with other potential partners. National perspective. Procurement experience and access to procurement routes for capital schemes which could offer efficiency savings.
Relevant business drivers	Network rail aims to deliver a safe, reliable and efficient railway for Britain. Network Rail does not have shareholders: it is directly accountable to its "members" and is regulated by the Office of Rail Regulation (ORR) Network Rail operates under a network licence. The licence contains a set of conditions under which Network Rail must operate. Network rail has two sorts of members – Public members drawn from the public and Industry members principally made up of passenger and freight train operating companies. In addition the Department for Transport (DfT) is a Member of Network Rail and has special membership rights, including appointment of the Director of Network Rail (not currently exercised) and certain rights to change to the company's constitution. The DfT also provides credit support in relation to the debt funding of the Network Rail group. ORR sets the contractual and financial framework within which Network Rail operates the network, ensuring that the company carries out its activities efficiently and is appropriately funded. The regulatory framework is designed to provide effective incentives, rewarding Network Rail for doing a good job. Where necessary ORR may enforce compliance with the network licence if Network rail fails to fulfil its obligations and impose monetary penalties.
Investment cycles	A periodic review typically takes place every five years and provides a major opportunity to drive through a step change industry performance and efficiency for the benefit of taxpayers and the passengers and freight customers who rely on Britain's railways. The last periodic review took place in 2008. The next periodic review is due in 2013. Stage one for PR13 – May 11- Feb 2012 - Consultation of key issues in preparation for later stages Stage two for PR13 – Feb 12 to Oct 13 - More detailed consultation. This is a key stage of the review when stakeholders to make their views known to government in relation to the issues and priorities considered most important. ORR will publish its determinations at the end of this stage. Stage three for PR13 – Oct 13 to April 14 - This stage sees the detailed planning by Network Rail and its partners for the implementation of the ORR determinations.
Additional information	Local authorities should demonstrate that Network Rail assets are either causing, or affected by, surface water flooding in order to engage them: or seek to identify and draw attention to ways in which LFRM schemes could contribute to the business drivers described above (e.g. reducing risk of embankment damage by redirecting surface water would help to "deliver a safe, reliable and efficient railway for Britain."). Joint funding opportunities would be via local negotiation with Network Rail.

Natural England (1)

Role in LFRM

Natural England (NE) (previously known as English Nature) is the non-departmental public body of the UK government; however, the Secretary of State for environment, Food and Rural Affairs has the legal power to issue guidance to Natural England on various matters. NE is responsible for ensuring that England's natural environment, including its land, flora and fauna, freshwater and marine environments, geology and soils are protected and improved. It also has a responsibility to help people enjoy, understand and access the natural environment.

Its powers include awarding grants, designating Areas of Outstanding Natural Beauty and Sites of Special Scientific Interest., managing certain National Nature Reserves, overseeing access to open country and other recreation rights, and enforcing the associated regulations. It is also responsible for the administration of numerous grant schemes and frameworks that finance the development and conservation of the natural environment, for example Environmental Stewardship, Countryside Stewardship, Environmentally Sensitive Areas, and Access to Nature. It is responsible for the delivery of some of Defra's Public Service Agreements (e.g. reversing the long-term decline in the number of farmland birds by 2020 and improving public access to the countryside). Natural England offer funding in a number of areas to support its objectives. Schemes range from the very large such as Environmental Stewardship to smaller ones like the Aggregates Levy Sustainability Fund.

Green exercise

Natural England is funding eight demonstration green exercise projects through local regional partnerships. The main aim is to increase levels of physical activity and people's connections to their local green spaces.

Green infrastructure

Natural England is promoting the concept of Green Infrastructure as a way to deliver a wide range of benefits for people and the natural environment together. It believes that Green Infrastructure should be delivered via the spatial planning system, as an integral part of new development everywhere, and should form a key part of proposals to regenerate existing urban areas. Natural England is working with partners in the Growth Areas, Growth Points and proposed Eco-towns to prepare and implement Green Infrastructure strategies and demonstrate good practice on the ground.

Nature Improvement Areas (NIAs) Pilot Programme

Launched in July 2011, with a total funding pot of £7.5 million, this scheme is being managed by Natural England on behalf of a consortium comprising: DEFRA, DCLG, Environment Agency, Forestry Commission and Natural England. It is intended to help fund local partnerships to '*plan and deliver significant improvements for wildlife and people through sustainable use of natural resources, restoring and creating wildlife habitats, connecting local sites and joining up local action.*' This scheme could offer a potential funding source for LFRM schemes which contribute to the creation of habitats and restoration of river environments.

Catchment Sensitive Farming

This scheme encourages best practices for tackling diffuse water pollution from agriculture (delivered in partnership with the Environment Agency and Defra).

Key areas of relevant expertise

Relevant stakeholder where LFRM measures involve (or can be combined with) the creation or enhancement of natural habitats – e.g. permanent wetlands which fulfil a flood attenuation function as well as improved habitats for flora and fauna. Holds data on designated sites. Provides expertise on habitat creation and restoration, biodiversity, protection and improvement of facilities for public engagement with the natural environment.

Natural England (2)

Relevant business drivers	Natural England focuses its activities and resources on four strategic outcomes: • a healthy natural environment • enjoyment of the natural environment • sustainable use of the natural environment • a secure environmental future Natural England is accountable to the Secretary of State and reports progress against its corporate plan through six impact indicators. Those most likely to serve as drivers for involvement with LFRM projects are: • Work with others to improve the status of priority habitat networks at the landscape scale. • Work with others to improve the status of threatened species. • Increase the area of Sites of Special Scientific Interest in favourable condition whilst maintaining 95 percent area in favourable or recovering condition.
Investment cycles	The majority of Natural England's funding comes via Grant in Aid from Defra. Its budget is set by Defra following the government's 4-yearly comprehensive spending review – the 2010 review set funding for 2011/12 to 2014/15. Funding for the NIA Pilot Programme will be for three years from 2012 to 2015. Deadline for applications is 30th September 2011.
Additional information	It is important that Natural England is consulted as a stakeholder in LFRM as they have a key role in the stewardship of the natural environment. It may be possible to identify certain aspects of LFRM schemes which qualify for grants from Natural England, and separate these into sub-projects to simplify funding applications.

NGOs, private landowners, community groups/trusts

Role in LFRM	NGOs and charitable trusts already in existence may have an interest in LFRM, or new ones may be formed specifically in order to participate in LFRM. Many flood risk management projects are on a fairly small, localised scale and may struggle to access, or attract funding from, the sources outlined above. In these instances grants or donations from sources such as NGOs or charities can provide an alternative route for funding. As well as funding, however, local community organisations have a significant role to play in the non-capital aspects of LFRM; in particular raising awareness of flood risk within the community and encouraging individual responsibility. These activities contribute to LFRM by helping to reduce the potential consequences of flooding as opposed to reducing the hazard itself. Local trusts may also be involved in ongoing maintenance of LFRM features such as watercourse vegetation management.
Key areas of relevant expertise	Local knowledge. Community engagement. Dissemination of information to the community.
Relevant business drivers	Local interests. Depends on the purpose of individual organisations.
Investment cycles	Various.
Additional information	It is important to have appropriate legal advice regarding the best way of organising contributions.

Private developers

Role in LFRM	Developers are responsible for managing the runoff from their sites. They are required to work together with the Environment Agency, water companies and local authorities to arrive at the best solution for LFRM in terms of benefit-cost ratios and the wider catchment context.
Key areas of relevant expertise	Understanding of flood risk in the wider context of the overall development process.
Relevant business drivers	The overall financial viability of a site is a developer's main concern. The House Builders' Federation (HBF) has expressed concerns about the ability of its members to continue to meet cost implications arising from the increasing regulatory burden. HBF has already submitted evidence to HM Treasury concerning the cost burden of regulation; highlighting that current land values and selling prices for new homes have limited potential to absorb the costs of additional infrastructure demands. This issue is most pertinent for residential developers who are restricted by the subdued housing market. Commercial developers such as major retail organisations may be less affected. Commercial developers may also have corporate responsibilities which may encourage them to invest in LFRM.
Investment cycles	Developers are not subject to any one specific investment cycle; however, individual sites may need to meet certain deadlines associated with Local Development Frameworks and other relevant local planning timelines.
Additional information	Individual negotiations will be key to motivating private developers to invest in LFRM. It will be advantageous for local authorities to have negotiation skills, an understanding of the commercial pressures on private sector developers, and an understanding of any potential areas of compromise. Planning authorities should seek to involve local authority officers with flood risk management responsibilities in planning negotiations from the earliest stages as drainage issues need to be identified and addressed at or even before master planning stage to ensure that adequate space is allocated within the site. The new SuDS Approving Body (SAB) function within LLFAs (introduced under Schedule 3 of the FWMA) will change how drainage applications are handled. It aims to encourage developers to make drainage planning a high priority and remove uncertainty about adoption and maintenance. However, a wider skill set is needed in local authorities to deal with forthcoming SAB responsibilities, as developers have significant experience in this field and SAB staff will need the expertise to negotiate on an equal footing. Developers have been required since 1989 to pay a per property connection charge of approximately £600 to water and sewerage companies to cover the cost of sewer network improvements in the wider catchment required to support the new development. They are also required to gift sewerage infrastructure to water and sewerage companies for adoption, meaning that the water and sewerage companies increase their asset base without cost to themselves as a result of development. In addition, the water and sewerage companies benefit from the rates paid by additional customers resulting from new development. It is worth noting that these factors combined may lead to reticence on the part of developers to contribute any additional funding toward sewer network improvements to reduce sewer flooding.

Chapter four – funding sources

Chapter objectives

This chapter is intended as a resource for Lead Local Flood Authorities to help them identify and access a range of potential funding sources for local flood risk management. It provides:

- Summary information on a wide range of funding sources which may be applicable for LFRM
- More detailed information on those currently considered most appropriate

It is recommended that the information contained within this section should be reviewed regularly and updated as appropriate to reflect developments in policy and precedent which may affect the potential viability of these and other funding sources for LFRM.

Chapter contents

Summary of potential funding sources for LFRM

The following summary table provides a quick reference overview of potential funding sources for LFRM. The original version of this was published by the LGA in their document: "Securing alternative sources of funding for flood and coastal erosion risk management (an interim guide produced by the LG Group)".

Source	What is it?	Pros	Cons	Most appropriate for	Further info
Flood Defence Grant-In-Aid (FDGiA)	Funding raised through general taxation for FCERM projects	Large sums potentially available. Most schemes expected to qualify for some element of FDGiA.	Total amount limited each year. Dependent upon schemes being put forward by RFCC.	All types of project, large and small	Environment Agency
Regional Flood and Coastal Committee (RFCC) Local Levy	Money raised from LLFAs for additional flood risk and coastal erosion management priorities not funded by FDGiA.	LLFA payments are compensated by central Government grants	Relatively small pot, £30m a year across England, 1/3rd of the total in London. Large increases may impact on council tax.	Supporting projects where FDGiA (full or partial amount) not available or more difficult to access.	RFCCs
Private beneficiary investment ('beneficiary pays')	Voluntary contributions from private beneficiaries of flood risk management. Could include local businesses, landlords, etc.	Becoming increasingly common. Potential for multi-£million contributions.	Can be time-consuming to agree and underpin with legal agreements.	Projects that deliver tangible reductions in future risk to major local business interests or landowners.	
Water company investment	Funds raised through the price review process. Water companies are able to invest in some types of surface water management, and increased resilience for their assets.	Water companies may be increasingly willing and able to invest in local FRM strategies in order to protect their customers and assets at risk of surface water flooding.	Amounts available may be limited unless water companies own the assets themselves. Timing is important due to water company investment cycles. Industry regulation can be problematic.	Projects providing increased surface water drainage capacity, which can be shown to offer tangible benefits to water company customers.	Further information in detailed tables below.
Community Infrastructure Levy	A locally set general charge which authorities can choose to implement. Levied on developers, per m2 of most new development across an authority's area.	Large sums could potentially be raised over time. Is flexible: authorities can adjust spending plans to meet priorities. Developers may be supportive as it will increase value of developments.	High demand likely to outstrip funding available, which will be limited by the overall viability of the development sites to which the CIL relates.	Long-term approaches to flood alleviation and regeneration, hand in hand	link

Source	What is it?	Pros	Cons	Most appropriate for	Further info
S106 (Town and Country Planning Act 1990)	Contributions from developers, linked to specific developments and the infrastructure required to make them acceptable in planning terms.	Can ensure specific issues are addressed.	Negotiated separately for each development.	To pay for defences that specific developments need in order to be safe and so acceptable in planning terms.	link
Council Tax	Funds raised through taxation on local householders	Can raise significant sums from relatively small % increases. Can be applied at parish, district or council level. 'Special items/expenses' can be applied in defined areas . Positive response to referendum would support Local Choice by demonstrating willingness to pay.	Can be unpopular with voters. Area-wide funding difficult to justify if not benefitting entire area equally. Significant increases will in future be subject to a requirement to hold a referendum, which is likely to return a no vote if levy is not applied at a level which reflects the benefits.	Spreading costs of the local flood risk management strategy over a wide area to make the impact per household small	
Public Works Loan Board (PWLB)	Finance from HM Treasury for public bodies	Potentially unlimited amounts available. Advantageous interest rates. Simple and quick application procedure.	All borrowing must be within 'prudential limits' – ie. councils must be satisfied they can afford to service the debt out of their revenue resources.	Major capital projects that deliver long-term benefits to the community	link
Business Rate Supplements	Following a vote of businesses, allows for an up to 2p increase on local business rates	Potentially raises significant sums over a period of time.	Needs to be levied across a whole authority and only on properties with a rateable value above £50,000	Increasing levels of protection to primarily businesses.	link
Business Improvement Districts	Following a vote of businesses, allows for a levy to be raised on local ratepayers	Can raise revenues over small areas – does not need to be an authority wide levy	Only be levied for 5 year periods – second terms are allowed following a further vote	Small scale very localised business protection.	link

Source	What is it?	Pros	Cons	Most appropriate for	Further info
Asset Backed Securities (Asset Backed Finance)	Finance raised on the back of assets created or enhanced through flood risk management	Potentially very large sums possible (e.g. Croydon)	Need to establish an public/private investment vehicle	Projects that deliver a range of assets and benefits, such as development, urban regeneration, housing, etc	link
General Drainage Charge/Special Drainage Charge	Money raised from landowners for additional works by Environment Agency	Raises £3m a year in Anglian region	Not applied outside of Anglian region (but could be)	Projects that protect largely agricultural areas.	
Local authority fees and charges	Money raised from specific beneficiaries of defences	Can be done under existing powers	May not raise much money. Charge payers must support the idea.	Projects that protect small numbers of easily identifiable properties, where there is strong support for the project.	
Trusts, community groups, NGOs	Formation of a legal entity to channel revenue raising into additional flood and coastal defence and other relevant projects	Can bring together a wide range of community interests and projects under a single banner.	Can take a lot of energy and some seed-corn funding to set up.	Where there is a strong community spirit and opportunities to tie investment in with tourism, regeneration etc of an area.	link
Regional Growth Fund	Government money to help regions reliant on public sector industries to realise private sector growth	Recognises flood defence projects can help meet regeneration and economic growth goals	Only available for a few years. 2011/12 fund over-subscribed.	Specific projects that achieve regeneration and economic development goals	link
Business Rate Retention	The Local Government Resource Review is considering options to enable councils to retain their locally-raised business rates. Proposals published in July '11 for consultation provide an opportunity for comment prior to preparation of Primary Legislation.	Such an approach could help set free many local councils from dependency on central government funding and provide incentives, through the business rates system, for them to promote economic growth	Business Rates would not be a new funding source, but local retention allows authorities to prioritise its spending taking into account wider services they are required to deliver.	Schemes that include protection for new or expanded business districts.	link

Source	What is it?	Pros	Cons	Most appropriate for	Further info
Tax Increment Finance (TIF)	Borrowing for the up-front financing of capital investment for a defined areas to be developed, which without the TIF would not proceed, that will provide an increase in rates yield.	Allows for the forward funding of infrastructure for a development to be delivered. May be scope for 'risk-sharing' loans from private-sector lenders, linking councils' liability to repay with actual TIF income - thus guaranteeing the affordability of the borrowing.	TIF not allowed under existing powers. The Local Government Resource Review is considering how to deliver TIF powers alongside local retention of business rates. Any borrowing must still be within 'prudential limits'.	New development which will ultimately create additional rates against which borrowing can be made, but which requires flood risk management measures up front to enable development to proceed.	link
New Homes Bonus	A financial incentive to build new housing	May help fund any additional local infrastructure needed	Must not lead to inappropriate development in areas at flood risk or coastal change.	Where a particular development is dependent of flood risk management	link
EU grants (EU Structure Fund, European Regional Development Fund, Solidarity Fund – emergency only)	Various grants and development funds available either as one-offs or on a regular basis from the European Union	Potentially large sums of money available.	Application processes can be complex and time consuming.	Projects that facilitate commercial development, benefit deprived areas/groups, or offer environmental benefits.	
Rural Development Programme – England					
Lottery funding (Big Lottery Fund, Heritage Lottery Fund)	Funding provided by the National Lottery for projects benefitting UK cultural heritage.			Projects that improve health, education, the environment, UK heritage, etc.	
Other local authority revenue funds	Any unringfenced local authority revenue funds that might be tapped into ad hoc, for example funding relating to Wellbeing Powers.			Projects with potential to offer wider benefits for the community or environment, such as improved health and wellbeing.	

Source	What is it?	Pros	Cons	Most appropriate for	Further info
Council Reserves					
Planning tariffs (end in 2013)					
Local Government Bonds	Means of borrowing from the capital markets	Possibly lower interest rates than loans from PWLB (but account must be taken of significant upfront costs of arrangement).	All borrowing must be within 'prudential limits' – i.e. councils must be satisfied they can afford to service the debt out of their revenue resources.. Not practicable for loans of less than about £200m.	Extremely large capital projects.	
Private Finance Initiative			Out of favour, due to risk that investments remain 'on balance sheet'		
Landfill Community Fund	The Landfill Tax Credit Scheme (LTCS) was introduced with the landfill tax and enables Landfill Operators to donate up to 6.5% of their landfill tax liability to implement social and environmental projects.				
Insurance reductions			Realised by individual property owners, therefore difficult to capture and use to pay for defences unless by agreement		
Green Infrastructure Bank			Not available yet, and may not offer advantages over borrowing from other sources.		

Detailed information on funding sources currently considered the most viable

More detail on those sources of funding considered most likely to offer viable opportunities for LFRM is provided in the following tables. These do not offer an exhaustive source of information about each source but address the key questions relevant to LLFAs when looking to identify and access a range of potential funding sources for LFRM measures, namely:

- What is the funding intended for?
- Who controls the funding?
- When is funding allocated?
- How is funding allocated?

These tables are intended as a resource to help LLFAs in the identification and pursuit of potential funding sources for LFRM. They should be referenced as soon as options are being considered within the LFRMS for the following reasons:

- Timescales for accessing required funding sources may affect decisions regarding the viability and timing of certain options
- The likelihood of obtaining adequate funding for particular options may affect the selection process
- The sooner funding sources are investigated for potential options, the less likely it is that critical funding deadlines will be missed
- The type of funding sources suitable for certain options may require the engagement of additional partners to maximise the likelihood of accessing them

Officers responsible for identifying funding sources for LFRM should consult their internal funding experts; specifically Finance Officer(s) but also colleagues in other departments who may have relevant expertise (e.g. planning or development control).

	Flood Defence Grant in Aid (1)
What is the funding intended for?	For certain infrastructure projects, funding may be available in the form of grants from central Government. These projects normally have to meet specific criteria and are administered and managed by a regulating body. In relation to flood risk management infrastructure, capital funding from Government is provided through Flood Defence Grant-in-Aid (or FDGiA). FDGiA is received from Defra and administered and managed by the Environment Agency for activities in England (other arrangements exist for Wales). FDGiA has historically been the most important source of funding for flood risk management and coastal erosion schemes. However until recently it was only available to main river and coastal flood risk management schemes. It is now available to projects relating to all sources of flooding. It comprises funding raised through general taxation.
Who controls the funding?	The **Environment Agency** administers and manages the FDGiA budget. Funding for the current Comprehensive Spending Review period (2012/13 to 2014/15) is prioritised through a formula derived from the "Flood and Coastal Resilience Partnership Funding" arrangement, as developed by Defra (May 2011). All funding approvals will also be subject to the consent of the relevant **Regional Flood and Coastal Committee** (RFCC, formerly RFDC) and the overall availability of funding from all potential sources.
When is funding allocated?	To apply for Government grant, local authorities and internal drainage boards need to construct a Medium Term Plan in liaison with their Environment Agency Area Flood and Coastal Risk Manager **by the end of June each year**. Funding approvals are progressed within the overall flood risk management programme (http://www.environment-agency.gov.uk/research/planning/118129.aspx). Stages within the process are as follows: • Forward Planning and Allocation of Funding • Application for Grant Aid • Approval of Preliminary Study or Project • Variations to a Preliminary Study or Project • Payment of Grant • Project Closure • Final Accounts Outcome Measures (see below) are used to determine which applications will receive funding, and how much. FDGiA funding cannot be saved and carried forward from one year to the next, but must be used in the year for which it is allocated. FDGiA funding is normally confirmed by Defra for a three-year rolling period. The Medium Term Plan covers schemes that have funding earmarked over the three-year period, known as the Sanctioned List. Approvals are normally only given to schemes within this programme, therefore it is important that applications are submitted each year for any schemes expected to start within the following 3 years.

	Flood Defence Grant in Aid (2)
How is funding allocated?	To receive an element of FDGiA projects will need to meet the criteria set out here and, as a minimum in every case, demonstrate that in present value terms the expected whole-life benefits exceed the whole-life costs of the scheme. There are four categories under which projects can attract FDGiA. These are: • All benefits arising as a result of the investment, less those valued under the other outcome measures (Outcome Measure 1) • Households moved from one category of flood risk to a lower category (Outcome Measure 2) • Households better protected against coastal erosion (Outcome Measure 3) • Statutory environmental obligations met through flood and coastal erosion risk management (Outcome Measure 4) The maximum amount of funding available for each project will be based on the value of qualifying benefits under Outcome Measures 1, 2 and 3, plus the number of environmental outcomes achieved under Outcome Measure 4, each multiplied by the relevant payment rate. The total is then divided by the whole life costs of the project and expressed as a percentage score; the "Raw OM Score". A project scoring in excess of 100% qualifies for full FDGiA funding. These schemes would potentially be prioritised according to the availability of funding. For those projects scoring less than 100%, the deficit describes the amount of cost savings and/or contributions from other sources which would be necessary in order for the scheme to proceed. If contributions are available through partnership funding, the "Adjusted OM Score" can be determined. If this score exceeds 100%, this will enable it to be progressed, funded in part by FDGiA and in part by the partnership funding, with the proportion in accordance with its delivery of Outcome Measures. Detailed guidance for practitioners will be made available by the Environment Agency. A spreadsheet tool is also available to guide practitioners through the application process. Up to date information on the FDGiA application process, including a full table of the outcome measures (OMs) and benefits under each that will qualify for national funding is available at: http://archive.defra.gov.uk/environment/flooding/funding/documents/flood-coastal-resilience-policy-statement.pdf In addition, the Environment Agency has web pages dedicated to providing information on its various funding sources at: http://www.environment-agency.gov.uk/research/planning/116703.aspx
Practical Tips	Some projects will qualify for 100% funding, and others less. Contributions from other sources should be sought for ALL projects that go ahead, including those which qualify for 100% FDGiA. Contributions from alternative sources raised towards projects which are fully funded by FDGiA can be used to help fund other schemes in the LFRMS that are not. The RFCC is the gatekeeper for determining which schemes should be put forward for FDGiA. This means that aligning local schemes with regional priorities wherever possible will increase the likelihood of accessing this source of funding, and gaining the support of your local RFCC member is key.

	Local Levy Funding
What is the funding intended for?	Local Levy is an additional, locally raised, source of income raised by the Regional Flood and Coastal Committee. It is raised by way of a levy (precept) on County and Metropolitan Councils, Unitary Authorities and London Boroughs, shared on the basis of Band D Equivalents between all contributing bodies within the area of each RFCC. Money raised using this existing RFCC local levy will count as a local contribution in terms of the FDGiA process, even though the levy is supported by funding through the Department of Communities and Local Government. English RFCCs propose to raise total levies of approximately £30 million in the year 2011/2012. Going forward, in addition to this (and in recognition of the extension of local levy to encompass coastal issues with effect from April 2012) the levy support from central Government will be increased by £2.7 million from £10 million to £12.7 million. Local Levy funding can be used to support flood risk management projects that do not attract 100% national funding through Flood Defence Grant in Aid (FDGiA). Local Levy therefore allows locally important projects to be undertaken to reduce the risk of flooding within the Committee area. It has historically been used by Committees to fund fluvial and tidal flooding related schemes only. The Environment Agency has confirmed the local levy funding can now be used to help fund projects tackling any and all sources of flood risk, as well as coastal erosion. In some areas Local Levy funding may be linked to partnership arrangements, with the RFCC entering into partnership funding arrangements with capped contributions.
Who controls the funding?	The Local Levy is held by the RFCC, and the details of its application in a region are voted for annually by elected members on the RFCC. If the demand for partnership funding outstrips supply the RFCC has the option to raise a local levy to supplement partnership funding, in order to avoid any projects having to be deferred.
When is funding allocated?	The amount of the levy is agreed and approved annually. Funding is therefore confirmed on an annual basis but indicative contribution amounts for future years are provided for longer term schemes. Programmes for the individual RFCCs can be found on the Environment Agency's website at: http://www.environment-agency.gov.uk/research/planning/130679.aspx Unlike FDGiA, local levy funds can be saved and carried forward from one year to the next to enable them to be used to fund high cost schemes.
How is funding allocated?	A program of expenditure is set by the RFCC according to local and regional priorities. This enhances the RFCCs' ability to engage locally on issues for their communities.
Practical tips	Aligning local schemes with regional priorities wherever possible will increase the likelihood of accessing this source of funding. Gaining the support of your local RFCC member is key to accessing funding through this route. Not all locally strategic areas are viewed as regionally strategic. Sometimes it can take persistence and lateral thinking to make the case for regional prioritisation.

	Revenue Funding for new LLFA responsibilities
What is the funding intended for?	In December 2010 Defra announced £21million worth of grants to provide additional funding support to councils (in addition to existing Formula Grant arrangements) to perform new roles and duties under the Flood and Water Management Act and Flood Risk Regulations. Funding for 2011/12 will total £21 million rising to £36million for 2012/13 and subsequent years of this Spending Review period. This funding is intended to fully cover the costs of putting into place and carrying out new responsibilities under the Flood and Water Management Act 2010, such as flood mapping, producing risk management plans and supporting community flood awareness groups. Funds are provided directly to each LLFA via Local Services Support Grant. Amounts going to each authority are available on the Defra website: http://www.defra.gov.uk/news/2010/12/23/flood-funding/.
Who controls the funding?	The money is allocated by Defra via CLG, but once paid via Local Services Support Grant is managed internally by **local authorities** according to the local area's needs and priorities. Local authorities are publically accountable for their spending.
When is funding allocated?	Revenue funding is allocated annually.
How is funding allocated?	The grants are allocated based on individual risk faced by each local authority.
Practical tips	It should be noted that funding provided through this route into the Local Services Support Grant is not ring-fenced for flood risk management activities. It is therefore important that local authority officers with flood risk management responsibilities are aware of how much is granted to their authority for flood risk and actively engage with their local authority's Finance Officer(s) to ensure that this funding is not allocated elsewhere at the expense of local flood risk management activities without appropriate discussion and agreement.

	New Homes Bonus
What is the funding intended for?	The New Homes Bonus will match fund the additional council tax raised for new homes and properties brought back into use, with an additional amount for affordable homes, for the next six years (from April 2011). Until now, increased housing in communities has meant increased strain on public services and reduced amenities. The New Homes Bonus introduced in April 2011 by CLG will remove this disincentive by providing local authorities with the means to mitigate the strain the increased population causes. CLG has set aside almost £1 billion over the Comprehensive Spending Review period for the scheme, including nearly £200 million in 2011-12 in year 1 and £250 million for each of the following three years. The Bonus is intended to be a permanent feature of the local government finance system, and could potentially be used to help fund LFRM schemes without eating into overstretched council tax revenue.
Who controls the funding?	**Department for Communities and Local Government** (CLG) allocates the New Homes Bonus.
When is funding allocated?	Annually when the council tax budget is set.
How is funding allocated?	According to local political priorities.
Practical tips	This source of funding will be most viable in areas with high levels of new development planned. Regeneration schemes focusing on improving/re-building existing homes will not qualify.

	Council tax (including Levies and Precepts)
What is the funding intended for?	Subject to limits on overall budgets and the need for investment on other priorities, local authorities may choose to invest in local flood alleviation schemes out of income generated from council tax fees. This revenue may fund the capital and operational expenditure required to realise a LFRM scheme. Precepts can be applied at the parish, town, district and/or county level to fund specific requirements, including flood risk management. **Council Tax Levy:** Here the local authority identifies a specific and special expenditure requirement. The Council passes a resolution to levy a charge to meet this requirement. The implementation of the resolution requires agreement through a referendum of the whole Authority area. This approach was adopted in Gloucestershire following the 2007 floods. **Precepts:** Specific components of council tax (precepts) may be levied and redistributed to other agencies or authorities (typically councils from other levels of local government such as town or parish councils and other agencies). This route can be used to fund LFRM capital delivery and/or ongoing maintenance of flood defences or surface water management systems. Precepts are well suited for smaller annual sums, in particular the ongoing management of sustainable surface water drainage systems where operation and maintenance arrangements can be a barrier to implementation.
Who controls the funding?	**Local authorities** are responsible for setting and collecting council tax for their areas and for managing spend. Flood risk components (precepts) may be levied and redistributed to other agencies or authorities (typically councils from other levels of local government such as town or parish councils and other agencies). Each **precepting authority** sets its own precept every year. This funding route requires a local referendum in the parish, village(s) or districts concerned to agree to contribute to a local scheme. This may be subject to locally specific rules for election turn-out, and proportion of voters in favour of a proposal. For example in Cockermouth, householders voted in favour of paying an extra levy on their council tax to raise part of the local contribution needed to secure FDGiA for a major EA scheme.
When is funding allocated?	Local authorities typically begin preparing their capital and revenue estimates in September/October for the financial year commencing the following 1 April. Central Government's contribution is usually confirmed in December, and budgets are prepared which go to the Policy & Resources Committee and/or the Finance Committee for approval and submission to the full Council in February/March. The specifics of this timetable are likely to vary between areas.
How is funding allocated?	According to local political priorities. **Local authority Flood Risk Managers should work with Members, Finance Officer(s) and colleagues in other departments to promote flood risk management as a priority and maximise internal funding availability.**
Practical tips	This funding source is limited and there are many demands on it. In order to access funding through this route it will be necessary to clearly demonstrate the benefits of a scheme in terms of local political priorities. The Localism Bill states that a referendum would be legally required for a council tax rise if it were 'deemed excessive'. If the flooding does not affect the whole Authority area, support may be limited and localised so the level of application should be carefully targeted to make the precept affordable for individual households whilst avoiding too wide an application which could risk a 'no' vote at referendum. Extending the benefits of LFRM measures to a wider area can increase the likelihood of accessing this funding source. Highlight wider implications of reducing flood risk in parts of the area; for example whole town would see benefit of publicising improved protection from flooding if tourism has been affected by flood events in certain areas. There may be reluctance to maintain the levy as a permanent charge once the immediate impacts of a major flooding incident have abated, so it is important that local authorities capitalise on opportunities presented by increased risk awareness following flood events to establish this source of revenue as well as consistently working to maintain and raise public awareness of the risk and wider consequences of flooding.

	Local authority (other)
What is the funding intended for?	Local authorities have a wide range of responsibilities and funding allocated for other purposes may be accessible for LFRM, if links to those purposes can be established. Council tax makes up on average only around 25% of a local authority's annual income. Their main income comes from central government (DCLG) in the form of Formula Grant. Formula Grant (localgovglossary) is a blanket term for the main sources of general Government funding for English local authorities. A portion of the Formula Grant is allocated to flood risk; however, this is not ring-fenced and subject to limits on overall budgets and the need for investment on other priorities, local authorities may choose to invest more or less in local flood alleviation schemes out of their total budgets.
Who controls the funding?	Formula Grant is allocated by the **Department for Communities & Local Government**. **Local authorities** are responsible for managing their overall budgets, and are accountable to the public (via their elected members) and to central government. Some aspects of funding are ring-fenced for specific purposes but many are not.
When is funding allocated?	Local authorities typically begin preparing their capital and revenue estimates in September/October for the financial year commencing the following 1 April. Central Government's contribution is usually confirmed in December, and budgets are prepared which go to the Policy & Resources Committee and/or the Finance Committee for approval and submission to the full Council in February/March. The specifics of this timetable are likely to vary between areas. To enable a council to include specific capital projects in its budgetary planning, detailed information would be required the previous summer/early autumn. Applications for small grants towards revenue expenditure can normally be made in writing at any time of year but an application at the beginning of the financial year is likely to stand more chance of success. A rolling programme or priority system may be in place covering several years, which can be amended annually to adapt to changes in circumstances or local priorities (www.parishresources.org.uk).
How is funding allocated?	According to local political priorities. **Local authority Flood Risk Managers should work with Members, Finance Officer(s) and colleagues in other departments to promote flood risk management as a priority and maximise internal funding availability.**
Practical tips	Evidence shows that local authorities have been able to use their well-being power (Section 2 of the Local Government Act 2000) to support partnership activity with commercial, private, and third sector partners as well as other public organisations. LFRM schemes have significant potential to meet many of the criteria needed to justify providing funds under well-being powers, which focus on promoting the economic, social and environmental well-being of an area. Examples could be providing new (or regenerating existing) water-based leisure facilities or improving access to open spaces for residents of a deprived area as part of a wider flood risk scheme. For some ideas, see the Bourne Valley Park case study. **Local authority Flood Risk Managers should investigate possibilities for tying in with non-LFRM funding sources through ongoing discussion with their Finance Officer(s) and colleagues in other departments.**

	Business Rate Supplement
What is the funding intended for?	Similar to council tax levies and precepts for residential properties. Upper tier local authorities have a power (under the Business Rates Supplement Bill) to levy a local supplement on the business rate and to retain the proceeds for investment in that area. Proceeds must be spent on projects which contribute to the economic development of the local area, so in areas where businesses are at risk from flooding this could offer a route to collect contributions toward LFRM measures to reduce the risk (and hence potential costs) to the local economy.
Who controls the funding?	The **upper tier local authority** for an area is responsible for applying for and collecting the supplement. Consultation and, in certain circumstances, a ballot of businesses that would be affected, are required.
When is funding allocated?	Annually.
How is funding allocated?	According to local priorities for economic development.
Practical tips	Having a clear case for a positive cost benefit to local businesses will improve the chances of accessing this source of funding.

	Business Improvement Districts
What is the funding intended for?	A business improvement district (BID) is a defined area within which businesses pay an additional tax or fee in order to fund improvements within the district's boundaries. BIDs were introduced through legislation (the Local Government Act 2003) and subsequent regulations in 2004. This form of revenue is intended for use within the BID to fund services, such as cleaning streets, providing security, making capital improvements, construction of pedestrian and streetscape enhancements, and marketing the area (in addition to those already provided by the local authority). LFRM schemes could potentially access funding from this source if the scheme could be demonstrated to provide specific benefits to businesses within the area.
Who controls the funding?	BID levies are collected by **local authorities** as an additional business rate, on behalf of an **independent company** running a programme of additional services over and above that provided by the public sector.
When is funding allocated?	Annually.
How is funding allocated?	A Business Improvement District (BID) Levy is payable by ratepayers, in addition to the Business Rates, if they operate a property of a certain type that falls with a BID area. A BID can only operate if the majority of the businesses affected vote in favour of one being put in place. In order to obtain funding through this source an LFRM scheme would need to demonstrate a clear cost benefit to the majority of businesses within the defined BID area.
Practical tips	Having a clear case for a positive cost benefit to local businesses will improve the chances of accessing this source of funding.

	Developer based contributions (S106)
What is the funding intended for?	Section 106 of the Town and Country Planning Act 1990 allows a local planning authority to enter into a legally binding agreement (known as a Section 106 Agreement) with a developer over a particular issue. Negotiation of S106 contributions must be underpinned by a robust evaluation/costing exercise specific to the development in question: a general, district-wide levy is not acceptable. Section 106 Agreements must be in line with the three tests as set out in Community Infrastructure Regulations (2010), which state that any Section 106 planning obligations must be: (a) Necessary to make the development acceptable in planning terms; (b) Directly related to the development; and (c) Fairly and reasonably related in scale and kind to the development. Normally in the context of granting planning permission, Section 106 agreements are legal agreements negotiated between local planning authorities and developers. These agreements are a way of delivering or addressing matters that are necessary to make a development acceptable in planning terms. Section 106 agreements are increasingly used as a driver to support the provision of services and infrastructure, such as highways, recreational facilities, education, health and affordable housing. The agreements provide a means to ensure that a proposed development contributes to the creation of a sustainable environment, particularly by securing contributions towards the provision of infrastructure and facilities. There are numerous examples where funding for flood management has been sourced from levying a charge on private developers as part of the planning process. For example, Sedgemoor District Council is currently collecting contributions (via a Section 106 agreement) towards the cost of the strategic flood defence strategy for Bridgwater and in particular the Parrett Barrier. One of the principles applied is that the partners (Environment Agency and Sedgemoor District Council) will jointly commission a review of; the scheme cost estimates at key milestones, available alternative sources of funding and the strength of the business case for delivery of the scheme.
Who controls the funding?	The **local planning authority** is responsible for negotiating, collecting and managing funding obtained from **developers** through Section 106 Agreements. By their nature; however, Section 106 contributions are linked to an agreed purpose specified in the agreement terms for each development. This means that there is extremely limited potential for reallocation of funds once received.
When is funding allocated?	There is no standard investment cycle for this funding source. Every Section 106 agreement is attached to a specific planning application, and the receipt of contributions is contingent on works starting on site. Payment of financial contributions, or compliance with providing in kind obligations (i.e. the developer providing a service or infrastructure element), is typically triggered by implementation of a particular phase of the development, such as commencement, occupation or completion, and may also be linked to a certain number of properties (e.g. upon occupation of 200 homes).
How is funding allocated?	Allocation of funding is in accordance with the purpose agreed in the terms of each development-specific Section 106 Agreement. Government has issued instructions that S106 money needs to be spent within a specific timescale. If the money is not spent within a reasonable agreed timeframe then the planning authority needs to sit down & renegotiate this timeframe with the developers. If the money cannot be spent on its intended purpose within 5yrs then there is a risk that it will need to be refunded to developers – this is already happening in some places.

	Developer based contributions (S106)
Practical tips	Site viability is key to a developer's willingness to contribute to this type of agreement. Providing all costs have been factored into the price the developer pays for a site and the market value of the development justifies the necessary investment then negotiations are more likely to succeed. The earlier any LFRM costs associated with a site are identified the better, therefore, since developers can then factor these costs into the price of the land and make better informed decisions as to the overall viability of the site. Where viability is borderline, negotiating any additional costs through Section 106 Agreements is likely to prove challenging. If a S106 agreement is to be linked to certain stages in the development it is important to ensure that the money will be available in time. As LFRM schemes tend to take time to implement and planning often requires work to be at least commenced prior to development, it is advantageous to secure the injection of funds at the earliest possible moment to avoid a stalemate – it may be necessary to make arrangements for the contributions to be financed by another route in advance of work starting on the development site. The House Builders' Federation (HBF) has expressed concerns about the ability of its members to continue to meet cost implications arising from the increasing regulatory burden. HBF has already submitted evidence to HM Treasury concerning the cost burden of regulation; highlighting that current land values and selling prices for new homes have limited potential to absorb the costs of additional infrastructure demands. It is important to be clear about the cost benefit of the measures for developers. There are many demands on developer funding and after legal obligations those which present a clear cost benefit advantage to the developer are most likely to succeed. It is likely to be beneficial if the planning authority representative has strong negotiating skills and is experienced in handling this type of agreement. An understanding and experience of flood risk management in the context of the overall development process is also important. It is also worth noting the following points in any negotiations with developers, as these factors combined may lead to reticence on the part of developers to contribute any additional funding toward sewer network improvements. Developers have been required since 1989 to pay a per property connection charge of approximately £600 to water and sewerage companies to cover the cost of sewer network improvements in the wider catchment required to support the new development. They are also required to gift sewerage infrastructure to water and sewerage companies for adoption, meaning that the water and sewerage companies increase their asset base without cost to themselves as a result of development. In addition, the water and sewerage companies benefit from the rates paid by additional customers resulting from new development. **S106 and CIL** The introduction of CIL does not mean the end of S106 agreements, and it will still be possible to use them to pool funding. However, this is likely to be appropriate in only a small number of cases. Once the CIL is adopted, or from 2014 at the latest, new restrictions will come into place meaning that it will only be permissible to pool Section 106 contributions from a maximum of five planning applications. This will be backdated, so that all Section 106 agreements entered into after 6 April 2010 will be counted towards the total of five applications. S106 charges must be directly related to the development, e.g. the request must identify a quantifiable, specific impact caused by the development that the contribution would address. Funds collected through the CIL are not ring-fenced and can be used for any infrastructure that "supports development" and can be switched between different projects. This provides much more flexibility in how local authorities use the money than is possible under S106 agreements.

	Community Infrastructure Levy (CIL)
What is the funding intended for?	From April 2010, the Community Infrastructure Levy is a new 'tariff' style charge which local authorities in England and Wales are empowered, but not required, to charge on all new houses (and other buildings / extensions to buildings of more than $100m^2$)for capital expenditure purposes. The proceeds of the levy are to be spent on local and sub-regional infrastructure to support the development of the area. The Coalition Government has recently amended the guidance to underline the significance of neighbourhood involvement and accountability.
Who controls the funding?	Local authorities are responsible for setting and collecting CIL charges , and for managing its expenditure. Using new powers introduced in the Localism Bill, the Government will require charging authorities to allocate a " meaningful proportion " of CIL revenues raised in each neighbourhood back to that neighbourhood, although they will retain the ability to use the remainder of the levy income to address the cumulative impact on infrastructure that may occur further away from the development. Local authorities will need to work closely with neighbourhoods to decide what infrastructure they require, and balance neighbourhood funding with wider infrastructure funding that supports growth.
When is funding allocated?	CIL charges are set in advance and not subject to developer negotiation. Once collected, local authorities are free to allocate the funding to any kind of project that supports development. The governance and timing of such allocations will be subject to the processes established by the local authority in question.
How is funding allocated?	The charges are based on simple formulae which relate the size of the charge to the size and type of the development paying it. Funds collected through the CIL can be used for any infrastructure that “supports development” and can be switched between different projects. This provides much more flexibility than is possible under S106 agreements. There is no site-by-site negotiation of the charge, and there would be only very limited circumstances in which a developer could appeal.
Practical tips	There are expected to be many different priorities competing for CIL funding and so the availability of funding for LFRM schemes in any one area is likely to be limited unless a particularly high priority is placed on them by the local authority administering the CIL. In order to improve likelihood of accessing CIL monies for LFRM it will be necessary to ‘sell’ flood risk as a local political priority. Schemes seeking CIL will stand a better chance of success if they are included from the earliest possible opportunity on the LLFA’s Infrastructure Delivery Plan. Highlighting what will the consequences would be if the LFRM infrastructure is not provided, or if it is provided later than planned, will help to support prioritisation. The prime responsibility for delivery of infrastructure funded through CIL will lie with the local authority, meaning that responsibility, not the developer’s, to ensure that infrastructure is put in place at the right time. Local authorities are not permitted to borrow against future CIL income, so there may be difficulties in delivering the infrastructure at the point when it is needed. **CIL and S106** Once the CIL is in adopted, this should be the main mechanism for pooling contributions from developers. S106 charges must be directly related to the development, e.g. the request must identify a quantifiable, specific impact caused by the development that the contribution would address. Funds collected through the CIL are not ring-fenced and can be used for any infrastructure that “supports development” and can be switched between different projects. This provides much more flexibility in how local authorities use the money than is possible under S106 agreements. CLG has published guidance on CIL which provides information on how to set CIL charges, how the CIL will be applied and the relationship between CIL and planning.

	Public Works Loan Board (PWLB)
What is the funding intended for?	For larger scale projects, local authorities, Internal Drainage Boards (and a small number of other bodies such as parish councils) the Public Works Loans Board provides a source of loans. The PWLB is a statutory body operating within the UK Debt Management Office (a department of the UK Treasury Office). The PWLB is responsible for lending money to local authorities, as well as collecting the repayments. If a local authority has its application accepted it may raise long-term funding and pay back the loan made by the PWLB at advantageous interest rates. At present nearly all borrowers are local authorities requiring loans for capital purposes. In 2008/9 the PWLB loaned circa £6 billion and had total outstanding loans of £50 billion. The PWLB also lends to Internal Drainage Boards (providing they have a loan sanction from Defra), and to parish and town councils (providing they have a borrowing approval from DCLG).
Who controls the funding?	The **Public Works Loan Board** is an independent and unpaid statutory body which consists of up to twelve Commissioners appointed by the Crown. Funding is provided by Act of Parliament, drawn from the National Loans Fund (interest rates are set by the Treasury). Applications for funding can be made by **local authorities**, **IDBs** and **parish councils**.
When is funding allocated?	Applications can be made on an ad hoc basis.
How is funding allocated?	An authority has to demonstrate its ability to meet the costs of borrowing through its future revenues. The Commissioners are legally required, before making a loan, to satisfy themselves that there is sufficient security for its repayment.
Practical tips	N/A

	Tax Increment Funding
What is the funding intended for?	The Government announced in September 2010 that Tax Increment Finance (TIF) powers for local authorities were to be included in the government's sub-national growth white paper. This funding source is **not yet active in the UK**. The provision of new public infrastructure can increase the value of surrounding properties which in turn can lead to increased tax revenues. The increase of tax revenue over the former tax base is the 'tax increment'. In the proposed UK TIF model a proportion of future business rates from an area is reinvested back into infrastructure and related development. TIF is designed to address infrastructure improvements that are needed to support growth but would otherwise never occur in the market, i.e. to generate funding for public projects that would otherwise be economically unaffordable. It can be applied where the sources of funding available for a scheme to deliver economic growth and renewal cannot cover the cost of infrastructure needed by a scheme.
Who controls the funding?	The lead agency – usually a **local authority**, with **private sector partners** or other combination – raises money up front to pay for infrastructure, on the assumption that increased business rate revenues generated by the scheme will be used to repay the initial investment. Up front funding may be borrowed as required from public or private sources, or it could be provided by the developer from capital available to it.
When is funding allocated?	N/A
How is funding allocated?	N/A
Practical tips	If TIF is taken forward in the UK it will operate within a carefully designed framework of rules, which the Government will work closely with Local Authorities to develop. More information on how TIF will operate will be provided by the government in due course.

	Asset backed financing
What is the funding intended for?	Local Asset-Backed Vehicles (LABVs) are arrangements where local authority assets are used to lever long-term investment from the private sector to fund development projects. They are designed to: •bring together public and private sector partners in order to pool finance, land, planning powers and expertise; •deliver an acceptable balance of risk and return for partners; and •support strategic planning and delivery of projects This approach is best suited to those cities or regions that can identify a portfolio of assets, a pipeline of regeneration projects and suitable institutional investors, offering a route to unlock additional private sector investment. They have been mainly used for regeneration and housing programmes. For example, Blueprint was created in May 2005 to raise money from the East Midlands Development Agency's property portfolio and channel the funds into regeneration projects.
Who controls the funding?	The **Local Asset-Backed Vehicle** is responsible for raising funds from public and private investment against public sector assets, and manages spending according to its development priorities.
When is funding allocated?	N/A
How is funding allocated?	N/A
Practical tips	Asset-backed vehicles (ABV) are in place at the regional level, including Blueprint in the East Midlands and the North East. British Waterways has an ABV, ISIS Regeneration, focussed on site regeneration. Leeds and Croydon are also pursuing LABV arrangements.

	Regional Growth Fund
What is the funding intended for?	The Regional Growth Fund (RGF) is a new £1.4bn 3 year Fund set up in 2010 by the Department for Business, Innovation and Skills that will operate across England to stimulate private sector led sustainable economic growth and employment. The RGF is connected with the Government's White Paper on Local Growth, and aims to support the transition from public sector to private sector-led growth.
Who controls the funding?	Funding is provided by **central government** via the **Department for Business Innovation and Skills**.
When is funding allocated?	The Regional Growth Fund (RGF) is now a £2.4bn fund operating across England from 2011 to 2015. It supports projects and programmes that lever private sector investment to create economic growth and sustainable employment. It aims particularly to help those areas and communities which were dependent on the public sector to make the transition to sustainable private sector-led growth and prosperity.
How is funding allocated?	Private sector companies and public/private partnerships are eligible to bid. The minimum threshold for bids is £1m. Qualifying assessment criteria state that projects should: • create additional sustainable private sector growth; • rebalance the economy in areas currently dependent on the public sector; • be at risk of not being progressed without this support; • offer value for money; and • be state aid compliant. Projects can be individual schemes, packages of smaller schemes or strategic investment programmes. Applications will be sifted and competitively assessed with review by Ministers.
Practical tips	The first 2 rounds of RGF bidding have been massively oversubscribed, and the pressure on this limited fund makes it **unlikely to offer a realistic source of funding for most LFRM schemes**.

	Private beneficiary funding
What is the funding intended for?	In instances where certain parties benefit disproportionately more than others from a scheme the “beneficiary pays” approach to funding can work well. Approaching individual major beneficiaries for proportional contributions can be a fair and effective way of funding a scheme, as well as potentially minimising parties involved in decision-making which can help to streamline implementation. This type of funding may also apply whereby residents affected by flooding may wish to provide individual or collective contributions towards a scheme or schemes to benefit their community.
Who controls the funding?	**Private individuals and businesses benefitting** from proposed LFRM measures.
When is funding allocated?	According to individual circumstances – no fixed timetable.
How is funding allocated?	By negotiation and agreement of terms.
Practical tips	As LFRM schemes tend to take time to implement and planning often requires work to be at least commenced prior to development, it is advantageous to secure the injection of funds at the earliest possible moment to avoid a stalemate. If a community group contribution is involved, legal advice should be sought on how contributions are collected and managed, and what form of contractual arrangements are entered into with other parties. Communities could set up a community interest company for example, as done by residents of Bucklebury (http://www.floodalleviation.co.uk), to collect and manage individual donations.

	Private Sector Finance
What is the funding intended for?	The use of private finance vehicles has become a frequent means of funding infrastructure projects, which have traditionally been delivered by the public sector. Public Private Partnerships have proved popular in recent times as they are a mechanism to attract the finance (and skills) from the private sector whilst delivering a public service effectively. The main advantage of Public Private Partnerships is the creation of value for money, which is driven by a collection of several factors. The most important value for money-drivers are the transfer of risk, the output based specification, the long-term nature of contracts, the performance measures, the increased competition and the private sector management. Other important advantages of Public Private Partnerships typically include the quicker delivery of projects, improved incentives to market forces, cost efficiencies, broad support for Public Private Partnerships and improved cost calculations by the public sector.
Who controls the funding?	Project specific.
When is funding allocated?	Project specific. Availability of funding may depend on the investment programmes of public sector partners.
How is funding allocated?	Public Private Partnerships are alliances between public bodies, local authorities or central government, and private companies set up to deliver a public project or service typically involve the joint ownership of a special purpose vehicle established under company law to deliver a particular project. Private Finance Initiatives (PFI) represent a more formal approach to Public Private Partnerships in which the public sector contracts to purchase services on a long-term basis so as to take advantage of private sector management skills (incentivised by having private finance at risk). The private sector partner takes on responsibility for providing a public service, including maintaining, enhancing or constructing the necessary infrastructure and the public sector specifies a level of service in return for an annual payment, called a unitary charge.
Practical tips	Public Private Partnership/Private Finance Initiative projects have some key disadvantages, the most notable of which is the high initial cost of establishing the various alliances. These costs tend to be higher than would normally be incurred due to the complexity of the relations between the diverse actors and because of the typical long duration of these relations. In addition, it should be recognised that private sector investors are likely to want to see a return in the short to medium term. Investment cycles may also vary for each organisation and business sector involved. The timing and management of investment returns is therefore an issue which needs to be carefully considered and discussed up front in order to avoid putting private investors off flood risk management projects. The 20 year Broadland Flood Alleviation Project, which is a £140m contract that began in 2001, is an example of where a flood alleviation scheme is being successfully delivered using a Public Private Partnership funding approach. This scheme provides a range of flood defence improvement, maintenance and emergency response services in the Norfolk Broads.

	Non-Government Organisations (NGOs) and charitable trusts
What is the funding intended for?	Many LFRM projects are on a fairly small, localised scale and may struggle to access, or attract funding from, sources outlined here. In these instances grants or donations from sources such as NGOs (Non-Government Organisations) or charities can provide an additional/alternative route for funding. NGOs are non-profit, voluntary citizens' groups organised on a local, national or international level. They tend to be task-oriented, driven by people with a common interest, and may be organized to provide analysis and expertise around specific issues. For example, local citizens with a common interest in protecting their town against flood risk could form an NGO, and/or potentially establish a trust fund, to undertake necessary works (such as implementation of SUDS measures to reduce surface water flooding, or ongoing maintenance of local flood defences, for example). A trust fund is a separate legal entity that holds property or assets of some kind for the benefit of a specific person, group of people or organisation.
Who controls the funding?	A trust fund can be established by any **individual or group** committed to providing a sustainable source of funding for a specific beneficiary. Trusts are governed by the terms under which they are created, which are typically set out in a trust instrument. A trust is managed by a trustee, who is obliged to administer the trust in accordance with these terms (and in agreement with relevant law).
When is funding allocated?	Project specific.
How is funding allocated?	Whilst NGOs may be wholly or partially funded by government, they avoid compromising their non-government status by excluding government representation. The terms of a trust must specify what assets are to be transferred into it, and who/what the beneficiaries will be.
Practical tips	These types of arrangement are becoming increasingly common (for example local waterways trusts); however, their success is dependent upon the ability of concerned individuals and organisations to raise the necessary funds.

	European Union funding
What is the funding intended for?	The European Union may make grants or loans available through a number of EU programmes taking forward their climate change agenda, which encompasses climate mitigation, adaption and flooding. These EU programmes include RDPE, ERDF, EERP, FP7, Interreg IVB, LIFE+ and URBACT II. The Interreg IVB North West Europe Initiative has been harnessed by Bradford City Council (FloodResilienCity) and Essex County Council (River Chelmer). The EU seeks to promote a wide variety of objectives through its various funding initiatives. The most relevant Thematic Priority in terms of LFRM, under the overall Priority Environmental Challenge, is adaptation to the spatial impacts of climate change. Other relevant objectives include supporting economic development in areas such as Cornwall. The 8th Call for Proposals opened on 4 March and closed on 1st April 2011 . Proposals were required to include organisations from at least two EU countries, at least one of which must be within the North West Europe Interreg Region. Access to substantial matched funding grants is possible through this route. Previous funding programme series' have focused on regeneration and improvement rather than building new infrastructure. No indication has yet been given as to the priorities of forthcoming series'.
Who controls the funding?	The **European Union**.
When is funding allocated?	Individual timetables apply – see EU website: http://europa.eu/policies-activities/funding-grants/index_en.htm (also Interreg programme website: http://www.nweurope.eu/index.php?act=faq and others).
How is funding allocated?	In order to obtain funding from any of the above sources, the potential flood risk management schemes must satisfy a number of criteria to qualify for help. The schemes, for example, must have clear and attainable targets and offer additional and sustainable advantages to the economic development of an area. Organisers would also typically have to demonstrate that without EU funding support, a scheme would not go ahead, or proceed in a reduced form, or at a reduced pace.
Practical tips	Regional Development Agencies and Urban Regeneration Companies have played a key role in accessing this source of funding on behalf of the areas for which they have responsibilities. These organisations are experienced and skilled in targeting applications to maximise the chances of success. LLFA are recommended to engage with partners who have experience in making this type of funding application. Activities contributing to achieving the objectives of the Water Framework Directive may qualify for EU funding, therefore LLFAs should identify explicitly the WFD benefits offered by their proposed LFRM activities.

	Defra one-off grants and pilot projects
What is the funding intended for?	**Defra** occasionally makes funding available through one-off grants and pilot projects. Risk management authorities should bear this in mind and be prepared to grasp appropriate opportunities if and when they arise. Some recent examples are detailed below.
Pilot Flood Resilience Project	A historical funding source relating to a pilot grant scheme for the implementation of property-level resistance and/or resilience measures. The aim was to explore approaches to implementation and to assess the likely take-up by property owners. Grant funding for the successful pilot schemes was made available from the summer of 2007 to be expended by March 2008. Local authorities can receive money directly from Defra in order to fund flood management through specific targeted initiatives. Eden District Council, for example, received £90k of grant money directly from Defra to part fund a flood mitigation scheme in Appleby. This grant money formed part of the national Defra £500k Pilot Flood Resilience project where local authorities and the Environment Agency were encouraged to work together in different ways to promote resilience schemes. This arrangement meant that councils could use their grant distribution powers to fund individual property protection schemes. The property owners were then expected to fund any work in excess of the grant available for their particular property. There are currently no plans for further resilience grants – all future funding is expected to come via FDGiA.
Surface Water Management and Early Action Funding	Surface water priority locations were derived from actions from the Pitt Review for specific measures to reduce surface water flooding in 77 indentified locations. Funding was allocated in summer 2009. The Surface Water Early Action fund from Defra was then provided for the year 2010-11, for managing surface water and groundwater flooding and preparing surface water plans for areas outside of the priority locations, this is administered by the Environment Agency. The funding allocation was announced in March 2010. In addition Defra is leading a programme of work to deliver improved local authority capacity to manage surface water flooding risks. All funding allocations have already been announced. Currently Preliminary Flood Risk Assessment (PFRA) preparation support from Defra has been provided in the form of one-off grants, to help lead local flood authorities (LLFAs) (county councils and unitary authorities) to produce assessments of local flood risk to comply with both the Flood Risk Regulations and the Flood and Water Management Act. The funding was announced in September 2010. There are currently no plans for further Early Action grants – all future funding will come via FDGiA.

Chapter five – case studies

Chapter objectives

This chapter aims to:

- Provide an information resource for local authority officers with flood risk management responsibilities
- Facilitate successful partnership delivery by learning from previous examples
- Identify common success factors from past schemes
- Highlight key challenges faced by others and indicate how these were overcome

Chapter contents

Introduction to case studies

A number of case studies have been analysed to inform the development of this guidance. Examples of pluvial flood risk management schemes were identified through survey and research and a shortlist was produced based on demonstration of the following criteria:

- Local flood risk objective(s)
- Collaboration of multiple partners
- Multiple funding sources
- Local authority involvement

A range of project types and scales were selected for the shortlist with the aim of providing good coverage of the potential issues, success factors and lessons learned. The case studies selected for analysis are discussed in the following pages. A map showing the approximate location of each project is also included for information.

In addition to those presented here, the Local Government website www.idea.gov.uk provides an increasing collection of case studies for reference by LLFAs. These are available on:
Case studies of local authority flood risk management partnerships on the IDeA flood pages

Case study keyword summaries

Isham surface water separation scheme: Sewer flooding; political influence to attract funding; interdependence as a motivator; improved cost benefit as a motivator.

Camborne, Pool and Redruth: Avoided infrastructure costs as a motivator; value of a long term strategic plan; importance of flexibility; facilitating development; importance of managing ongoing developer compliance with strategy.

Bourne Valley Park: Managed by a dedicated Project Officer; water quality and environmental benefits to attract funding; community support to attract funding; interdependence as a motivator; importance of agreeing and monitoring against strategic objectives.

Bourton-on-the-Water: Capitalisation of revenue funding; local leadership; community engagement; reducing costs by sharing partners' procurement routes.

Bucklebury Flood Alleviation Scheme: Community involvement; use of bespoke agreements to allocate responsibilities; community volunteering to reduce maintenance costs; use of trust funding; private beneficiary funding; proportioning costs based on council tax.

Hull Flood Mitigation Investment Plan: Identifying funding sources; partnership Terms of Reference; strategic planning of investment.

Isham surface water separation scheme

<u>Overview</u>

Context: Surface run-off from elevated farm land drained onto the highway, causing flooding. The highway gullies overloaded the foul sewer, causing sewer flooding to residents.

Collaborative approach: Separate financial contributions to fund a capital scheme delivered by one organisation, with negotiated adoption responsibilities for other organisations.

Funding mechanism: Anglian Water, Northamptonshire CC Highways Authority and Borough Council of Wellingborough contributed equal amounts to fund the project, with the initial finance and contractual arrangements for design and construction being organised by Northamptonshire CC Highways Authority. Contributions were confirmed informally by email in advance.

Solution: Land drainage from elevated farm land (which currently runs onto the highway) is now collected in a swale to allow permeation into the underlying sandstone. Exceedence flows are attenuated by the swale before overflowing into a new surface water sewer. Highway gulley connections have been removed from the foul sewer and connected into the new surface water sewer. An interceptor has been installed to protect the downstream watercourse from pollutants in the highway run-off.

Isham surface water separation scheme

Partners and beneficiaries

Partners	Motivation
Water company (Anglian Water)	Removed risk to properties with known sewer flooding incidences.
Highways Authority (Northamptonshire CC)	Resolved highway flooding problem.
Local authority (Borough Council of Wellingborough)	Resolved surface water flooding caused by land drainage.
Additional beneficiaries	**Benefits**
Residents	Sewer flooding to properties resolved.

Green highlight = funding partner
Yellow highlight = contribution in kind

Partnership arrangements and approach

Leadership: Northamptonshire CC Highways Authority identified the flooding issue and conceived the scheme to resolve it. The cause was not clearly the responsibility of any single party so they approached the other parties with responsibilities for addressing the symptoms of the problem; Anglian Water and Borough Council of Wellingborough; seeking collaboration and partnership funding. NCC Highways led the scheme, using their own framework contractor arrangements to provide a straightforward and cost effective route for commissioning design and construction. However, they worked with Anglian Water from the early design stages to ensure the design met the appropriate standards for adoption. NCC Highways were able to finance the capital works and obtain the financial contributions from the other parties on completion.

Identifying and motivating partners: Anglian Water and Borough Council of Wellingborough both had responsibilities for addressing the effects of the land drainage run-off problem; Anglian Water for the sewer flooding affecting its customers and BCW for the health, safety and wellbeing of local residents. Although the properties involved were not on the DG5 register for sewer flooding (meaning that Anglian Water did not have a regulatory target to address this problem), the political pressure applied by the local MP helped to persuade them to address the issue. The fact that costs were clearly identified from the outset, transparent and equally shared provided the reassurance Anglian Water needed before committing investment. The much-improved cost benefit offered by partnering, which enabled Anglian Water to achieve a resolution to the sewer flooding in return for just a third of the overall cost of the scheme, made this a much more attractive investment than delivering in isolation would have been.

Skills and resources: NCC Highways had access to the necessary skills and resources to undertake design and construction and to lead the scheme. Anglian Water had the detailed technical knowledge and skills which were required to enable smooth handover.

Isham surface water separation scheme

Challenges and Successes

Generic measures of success	How demonstrated?
Clear strategic purpose and aligned objectives	All three partners were clear on the benefits to their own organisations and were agreed on the same objective – improved drainage to resolve the flooding.
Constructive review of performance	No specific review programmed but incidence of flooding in same location will be monitored by all three parties.
Interdependence	All parties had responsibilities to address the problem but no one party was wholly responsible, so they needed to work together to solve the issue. The highways authority required Anglian Water to adopt the surface water drainage aspects of the solution, and Anglian Water required the highways authority to design and construct these to the appropriate standards for adoption.
Accountability	All partners individually accountable, but no specific measures in place as a partnership.
Scheme-specific success factors	
Good relationship	A strong relationship between the parties was engendered by openness and shared priorities. Working together from the outset meant that the highways authority and Anglian Water were both clear on what was required to enable the ultimate adoption process to go smoothly.
Political support	Although the scheme was rejected for FDGiA, the local MP put political pressure on the parties to ensure that the problem was resolved for residents, which raised the priority of the scheme with the partners prompting them to seek alternative ways of funding it.
Scheme-specific challenges	
Cause fell between authorities	Responsibility for land drainage issues is often unclear, meaning that accountability tends to fall between authorities. In this case all three parties wanted a resolution to the symptoms so instead of looking for blame they agreed to split the funding equally.
FDGiA rejection	The scheme was rejected for FDGiA and looked unlikely to go ahead, but the partners worked together to agree a fair alternative funding approach.

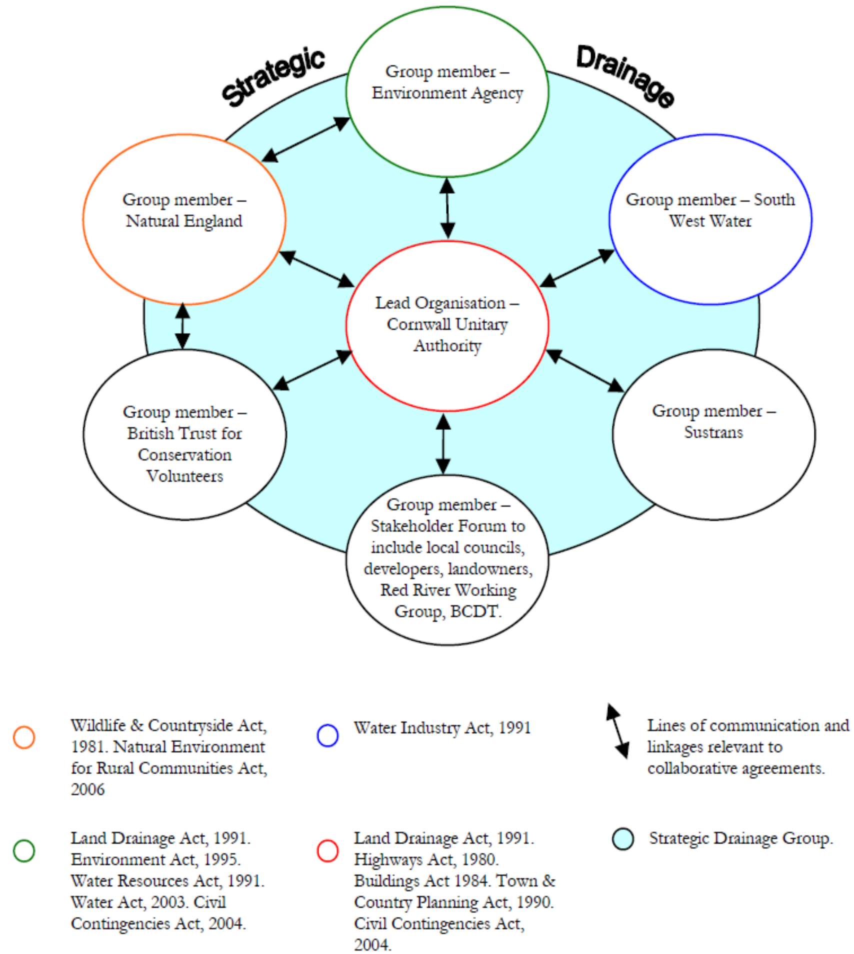
Camborne, Pool and Redruth

Overview

Context: Plans for significant development raised concerns over existing drainage infrastructure capacity and environmental capacity. Infiltration was not possible owing to the mining history and current mineral extraction rights. A strategic plan was needed to enable regeneration to be achieved without requiring significant infrastructure upgrades including a major investment at the sewage treatment works. The strategic plan also enabled the inclusion of biodiversity and water quality improvements.

Collaborative approach: Collaboration and integrated management of individually funded projects. Steering group initially brought together under IUD pilot scheme. Urban Regeneration Company obtained funding and local authority (as main end owner) project managed work. Strong support and direction from the Environment Agency and CPR Regeneration.

Funding mechanism: Urban Regeneration Company worked with the Homes and Communities Agency to apply for funding from the European Regional Development Fund. This was used to fund parts of the scheme relating to commercial development. Local authority provided a contribution of approximately £1m from New Growth Point Funding (central government), to facilitate residential parts of the scheme.



Solution: A SWMP had been undertaken as part of Defra IUD pilot project. A Drainage Implementation Strategy was commissioned to interpret the recommendations of the SWMP for this catchment into an achievable long term delivery plan. A sustainable drainage strategy was developed to provide a strategic surface water drainage system to serve all the proposed development areas within the catchment, thus avoiding the need for major upgrades to the existing sewage treatment works.

Camborne, Pool and Redruth

Partners and beneficiaries

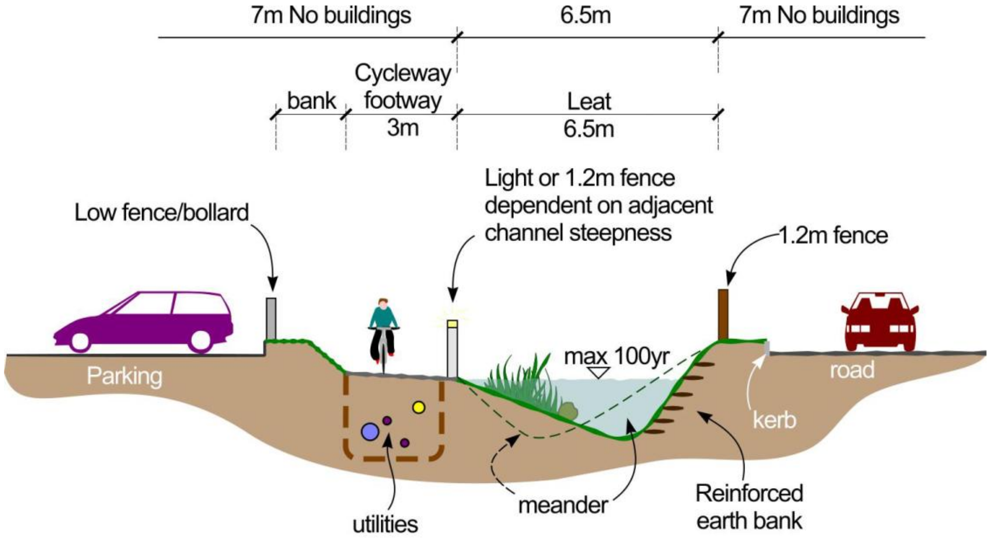
Partners	Motivation
Environment Agency	Reduce flooding of properties, improve river water quality, meet EU bathing water standards, research and development interest.
Water company (South West Water)	Save on sewer & treatment upgrades, help raise awareness of issues about the water environment and encourage customers to use water wisely.
Local authorities (Cornwall CC, Kerrier DC)	Resolve highway flooding. Increase attractiveness of area as tourist destination. Meet development targets and have some control over what they end up adopting
Natural England	Help protect and enhance biodiversity
Urban Regeneration Company (CPR Regeneration)	Fulfil brief to facilitate development
South West Regional Development Agency (SWRDA)	Enabling regeneration in accordance with their brief
Local Trusts	Local community engagement and improvement of community facilities
Sustrans	Developing sustainable transport links
Additional beneficiaries	**Benefits**
Residents	Improved amenity, reduced flood risk, reduced fly-tipping, regeneration of a deprived area.
Landowners/developers	Release land for development, plus strategic approach enabled incentivisation for redevelopment of brownfield sites by offering preferential surface water discharge rates.

Green highlight = funding partner
Yellow highlight = contribution in kind

Camborne, Pool and Redruth

Partnership arrangements and approach

Leadership: The lead was taken by CPR Regeneration, whose aim is "to bring together funding partners, local stakeholders and the private sector to focus investment and to deliver "joined up" regeneration projects." CPR Regeneration's funding partners were Cornwall County Council, Kerrier District Council, and the South West of England Regional Development Agency. CPR Regeneration (with the support of SWRDA) were the ideal organisation to take the lead in sourcing funding and bringing together the right partners.



Identifying and motivating partners: CPR Regeneration collaborated with the Homes and Communities Agency (HCA) to apply for European convergence funding as up front investment to progress the strategic drainage work needed to enable land to be released for development. CPR Regeneration approached Cornwall Council as the most appropriate organisation to project manage the drainage project due to their legislative powers, land drainage responsibilities, expertise in asset management of green open spaces, and responsibilities under the Flood and Water Management Act. The Council has played a key part as 'gatekeeper' by ensuring that developers comply with the strategy, and the Environment Agency has played a crucial role in driving forward the project and helping Cornwall Council to manage developer compliance through its role as a statutory consultee in the planning process. Because the Convergence funding focused on commercial development, Cornwall Council provided the funding required to support aspects of the scheme relating to residential development. The buy-in of such a wide range of partners was made possible by the range of benefits offered by this strategic scheme: it included biodiversity, water quality, reduced flood risk, public open space, community transport links, utilities corridor.

Skills and resources: Members of the steering group were selected based on their legislative powers, statutory status, local knowledge, or technical expertise (see diagram). All of the partners signed up to membership of the group in principle early on (on the proviso that exact responsibilities could be further negotiated at later stages).

Camborne, Pool and Redruth

Challenges and Successes

Generic measures of success	How demonstrated
Clear strategic purpose and aligned objectives	A clear strategic plan was developed at an early stage to enable development of the area to progress. All partners understood how they would benefit from the scheme, providing good leverage for the projects success. A consistent approach helped to build credibility.
Constructive review of performance	There appears to have been no specific review process in place to monitor stakeholder performance.
Interdependence	Each partner stood to benefit from the scheme as a whole, and would be unable to deliver the full scheme without the cooperation of other partners. To ensure adequate capacity was available for all of the development, individual site solutions would not have been feasible without strategic infrastructure. Collaboration ensured access to multiple funding streams.
Accountability	The Environment Agency is monitoring compliance with the strategic drainage plan through its role as a statutory consultee in the planning process. The RDA has devolved responsibility for managing Convergence funding and is accountable to CLG.
Scheme-specific success factors	**What worked and why**
Strong leadership	The project got off to a a strong start, with good direction (from Kerrier DC initially then later CPR and SWRDA) and early commitment and support from key partners (Environment Agency). However, getting people to commit to formal agreement of terms presented some challenges.
Thorough planning and project control	Interim stages and flexibility were built into a long term plan, which was supported by consistent membership with the right people on board. There was a good flow of cash and up front funding. A clear plan facilitated discussions between partners.
Scheme-specific challenges	**How overcome / lessons learnt**
Sticking to the plan in the long term	To ensure that site drainage plans continue to comply with the strategic plan going forward, it is important that the strong links between the planning and flood risk departments of the local authority and the Environment Agency are maintained.
Phasing of development sites	The delivery sequence of various elements of the scheme is dependent on individual developers.

Bourne Valley Park

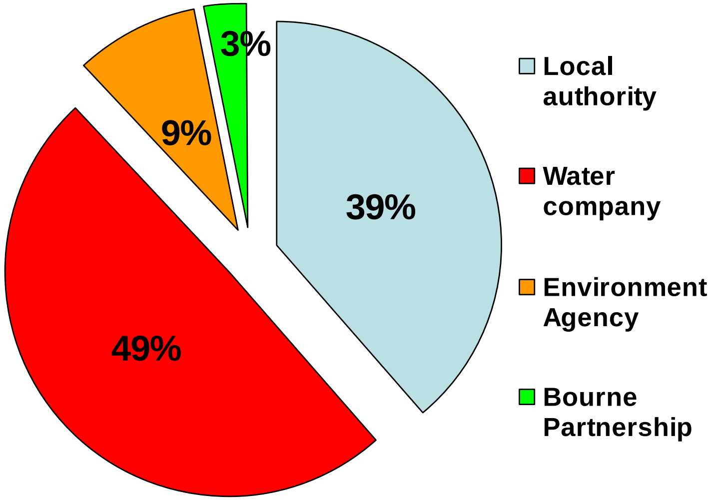
Overview

Context: The Bourne Stream experienced problems of diffuse pollution and flooding. Periods of poor water quality followed severe rainfall events, leading to failure of Bournemouth Pier bathing beach to comply with EC Bathing Water Directive 1976. Surface water drainage pipes discharge directly into the stream at regular intervals, and sewer misconnections contributed to pollution.

Collaborative approach: Collaboration and integrated management of individually funded projects. Partners pooled expertise and resources to work together toward common goals. Partners demonstrated their commitment to the project by providing funding for administration costs and a full time Project Officer's salary, helping to engender a feeling of common ownership.

Funding mechanism: Contributions from 5 partners were pooled to support the full time employment of a project officer to manage the day-to-day running of the project. Funding for delivery of individual elements was managed by the individual funding organisations. They also contributed 'in kind' to collaborative delivery by sharing local and specialised knowledge and providing project support in various non-financial forms. Additional funding was secured from both SITA Environmental Trust and Biffaward under the Landfill Tax Credit Scheme.

Solution: Originally a traditional drainage solution was proposed to upgrade the surface water sewer. Delivery of this would have fallen solely to the responsible water company. The partnership solution ultimately delivered a jointly-funded 'green' solution comprising a combination of storage and 'daylighting' of a watercourse. In addition to resolving the surface water flooding, biodiversity, water quality, amenity and community engagement were all enhanced as a result.



Proportions of funding by partner

Bourne Valley Park

Partners and beneficiaries

Partners	Motivation
Environment Agency	Reduce flooding of properties, improve river water quality, meet EU bathing water standards, research and development interest.
Water companies (Wessex Water, Bournemouth & West Hampshire Water)	Reduce pollution caused by misconnections of foul sewers to the surface water system (Wessex), help raise awareness of issues about the water environment and encourage customers to use water wisely.
Local authorities (Borough of Poole, Bournemouth Borough Council)	Meet responsibilities as riparian owners of the Bourne Stream and its banks. Resolve highway flooding. Increase attractiveness of area as tourist destination. Regeneration of a deprived area.
Dorset Wildlife Trust, The Dorset Coast Forum	Improve biodiversity, promote a sustainable approach to the management, use and development of the Dorset Coastal Zone, highlight conservation issues and help local people to enjoy the wildlife along the river corridor.
Natural England (formerly English Nature)	Help protect and enhance biodiversity at neighbouring nationally and internationally important heathland SSSI, SPA, SAC and Ramsar site.
Greenlink	Created the Bourne Valley Greenway network of cycle and pedestrian paths.
Bournemouth University	Foster integration of the University with its local catchment, contribute to research of the Bourne Stream.
Bournemouth Oceanarium	Raise profile, increase attractiveness of business location.
Additional beneficiaries	**Benefits**
Residents	Improved amenity, reduced flood risk, reduced fly-tipping, regeneration of a deprived area.

Green highlight = funding partner
Yellow highlight = contribution in kind

Bourne Valley Park

Partnership arrangements and approach

Leadership: The Environment Agency formed the Bourne Stream Partnership with the Borough of Poole and Bournemouth Borough Council to ensure effective management of the local watercourse and bathing beaches. These three organisations take the lead in Partnership projects, of which Bourne Valley Park is one of the largest. All three held some degree of responsibility for resolving the flooding and water quality issues associated with the Bourne Stream, but no single organisation had the powers or capabilities to succeed alone so they were motivated to collaborate by mutual dependence. Prior to formation of the Bourne Stream Partnership, several of the organisations were carrying out their own investigations into the possible sources of diffuse pollution.

Identifying and motivating partners: The other Partners are all organisations that have a vested interest in the stream and its catchment area. They contribute in a variety of ways to ensure that the Partnership meets its strategic objectives. Phase I was funded by contributions from a number of the Partners. Borough of Poole contributed £52,000 from Planning Obligations funding, to help regenerate this largely disused leisure facility in a deprived area. Wessex Water contributed £67,000, as well as contributing resources and expertise to identify and resolve sewer misconnections through its Operation Streamclean initiative. The Environment Agency contributed £12,000 from Fishing Rod Licence Income funding for Angling Participation Projects, which funded the provision of a fishing lake within the park. Natural England also contributed £2,000. A £45,000 grant was then secured for Phase II from Biffaward (a multi-million pound fund that awards grants to community and environmental projects in the UK). This application was successful (where a previous application had failed) mainly as a result of the support of the Project Working Group established by the Project Officer, which demonstrated significant community backing for the project.

Skills and resources: The person who was appointed as the project officer had an MSc in Coastal Zone Management, which would have been useful in aspects of the role such as; developing links with local and business communities and other academic/research institutions, linking to other relevant research, and being familiar with the types of funding available within this field of research. However, it would not necessarily be required for the day-to-day running of projects. Good organisational, interpersonal and communication skills are typically key to this type of role.

Bourne Valley Park

Challenges and Successes

Generic measures of success	How demonstrated
Clear strategic purpose and aligned objectives	The Partnership developed a vision statement, achieved through a number of agreed strategic objectives. Project Officer appointed to manage and monitor progress against these objectives.
Constructive review of performance	Project Officer role included analysing and evaluating approaches taken by Partnership. The Partnership attracted a number of research projects and assignments by students from various academic institutions which also helped further project aims and capture lessons learnt.
Interdependence	No single organisation had the regulatory powers or resource base to address the issues of flooding and diffuse pollution affecting the Bourne Stream. A collaborative approach was crucial to successful resolution of the issues. Integrated management provided access to resources and skills not available to any individual organisation.
Accountability	Annual report describing past achievement, finances and forward plans, which was circulated to partners, potential funding sources and other stakeholders. Follow-up ecological survey of the stream carried out to measure improvements in wildlife and conservation interest.
Scheme-specific success factors	**What worked and why**
Community engagement	The Project Working Group established by the Project Officer was able to generate significant support for the project within the local community, which was central to the success of the Biffaward funding application. The high level of community involvement helped to ensure that the project targeted local needs as well as raising awareness to help make the finished facility a success.
Strong project management	The direction and management provided by the dedicated Project Officer ensured that the project progressed smoothly. Effective coordination of partners and resources was key to success.
Scheme-specific challenges	**How overcome / lessons learnt**
Initial 'participant burnout'	Some partners felt overburdened with responsibilities and actions early on in the project. To avoid this, a partnership should have a defined organisational structure in place to allow fair and effective distribution of workload.

Bourton-on-the-Water

Overview

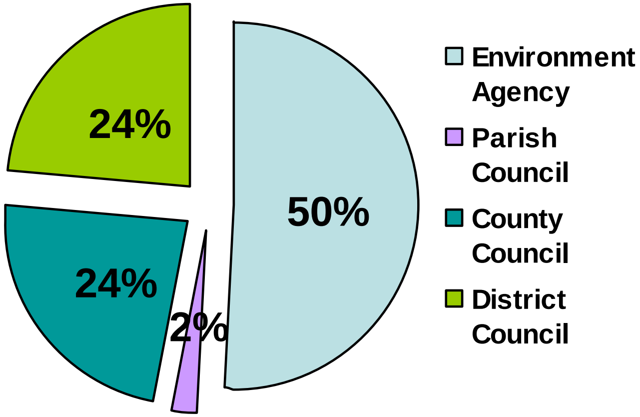
Context: In July 2007 Bourton-on-the-Water suffered extensive surface water flooding to more than one hundred and fifty properties and businesses in the village.

Collaborative approach: The Partnership developed a joint strategy under which separate organisations funded and delivered individual elements.

Funding mechanism: The scheme was funded by £118,000 from the Environment Agency, £55,000 each from the District Council and County Council, and £5,000 from the parish council. The DC contribution was allocated from Flood Recovery Grant money from central government, The County Council provided revenue funding (later capitalised to allow rollover from one financial year to the next) to the District Council to administer on behalf of the Parish. The Environment Agency managed its own contribution.

Solution: A Partnership Agreement was signed in 2008 by the Environment Agency and the Parish, District and County Councils, to implement flood alleviation works to reduce the risk of flooding from the River Windrush. The Environment Agency constructed a flood bund to increase storage capacity, and raised the left bank of the River Windrush to reduce the risk of flooding to properties in the High Street. Gloucestershire County Council contributed to the scheme by constructing a flood bund to protect properties and businesses. Cotswold District Council constructed flood bunds as well as clearing and extending existing drainage ditches in the village to improve the flow of water and the channel capacity.

Photos from
www.thisisgloucesttershire.co.uk



Proportions of funding by partner

Partners and beneficiaries

Partners	Motivation
Environment Agency	Reduce risk of flooding of properties.
Tier 1 local authority (Gloucestershire County Council)	Reduced flood risk to residents (hence reduced potential cost of future damages), also involved in its role as Highways Authority.
Tier 2 local authority (Cotswold District Council)	Reduced flood risk to residents (hence reduced potential cost of future damages).
Parish Council	Improved flood risk protection for the community which it represents.
Additional beneficiaries	**Benefits**
Residents	Reduced flood risk to properties.

Green highlight = funding partner
Yellow highlight = contribution in kind

Bourton-on-the-Water

Partnership arrangements and approach

Leadership: Parish councillors set up a flood committee, which included a Chamber of Commerce representative and lay members, to identify the projects and co-ordinate the agencies. In 2008, a partnership agreement was signed between the Environment Agency (EA), Gloucestershire County Council (GCC), Bourton-on-the-Water Parish Council and Cotswold District Council to implement flood alleviation works in the town. The partnership was chaired by a representative from the parish council. Gloucestershire CC promoted ownership of the project at District level by Cotswold DC, stepping back and encouraging the DC to manage the project themselves. The involvement and leadership of the parish council brought a strong local perspective to the project and helped to encourage local involvement. The Environment Agency's 'Flood Community Heroes' initiative nominated Bourton-on-the-Water for the 'Best example of partnership working to reduce flood risk' award, which recognises and praises the important work that individuals and communities are doing to reduce flood risk.

Identifying and motivating partners: The councils were motivated by the need to protect residents against a recurrence of the damage caused by the extreme events of 2007. Flooding in the village caused damage to properties and communities which motivated the parish council to take a lead and other local authorities to take action.

Skills and resources: Gloucestershire CC were able to offer the procurement route and initial finance. The District Council had a Land Drainage Engineer with the skills and experience to administer the scheme, with support from the Environment Agency and Gloucestershire CC.

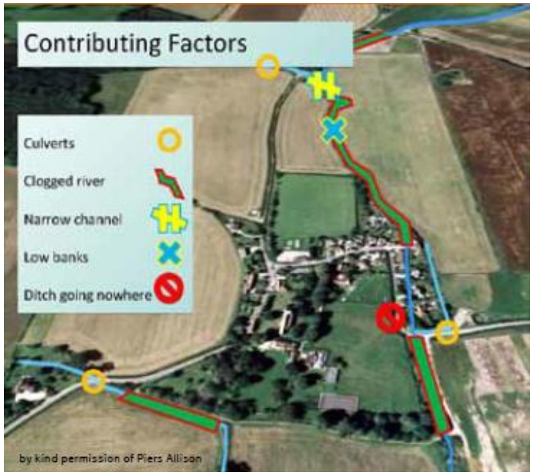
Challenges and Successes

Generic measures of success	How demonstrated
Clear strategic purpose and aligned objectives	All parties were motivated by their common driver of reducing flood risk to the village following the flooding events of 2007.
Constructive review of performance	No specific partnership performance review measures known.
Interdependence	Each party brought different skills and experience to the project without which it would not have been such a success.
Accountability	All parties signed a Partnership Agreement, the terms of which provided group accountability. All parties were also individually accountable under their own LFRM responsibilities.
Scheme-specific success factors	**What worked and why**
Community engagement	The Parish Council provided a strong community link and helped communicate with local residents, ensuring the scheme had the full backing of the community.
Local ownership	Although GCC provided the initial financing and the procurement route, they encouraged local ownership of the project by CDC.
Scheme-specific challenges	**How overcome / lessons learnt**
Cost overrun	The final cost of the project to CDC was greater than the budget allowed and the timing meant that waiting to apply for additional funding at the next Cabinet meeting would have delayed works. To overcome this issue, CDC was able to use certain emergency powers to authorise the allocation of additional funding from a capital allocation of £500,000, which had already been identified for flood alleviation works in the Council's Medium Term Financial Plan.

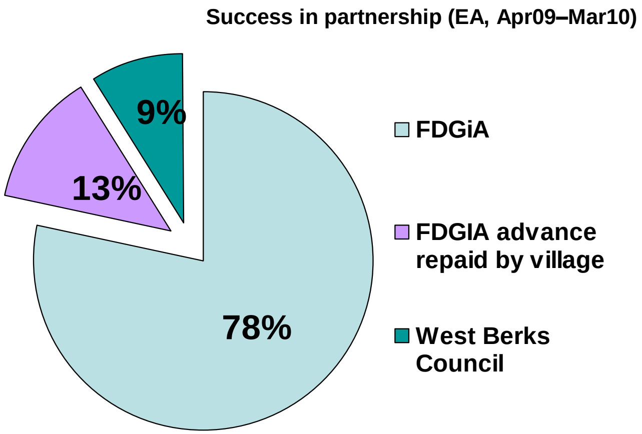
Bucklebury Flood Alleviation Scheme (2007-10)

Overview

Context: The village of Bucklebury has experienced a number of floods since the early 1990s from a combination of surface water and main river issues. In July 2007 extreme rainfall resulted in the River Pang overtopping into the floodplain, flooding 24 houses, the church and the village hall for several days.



Collaborative approach: Jointly funded by two partners with additional contributions agreed in writing but separately managed by a third partner.



Proportions of funding by partner

Funding mechanism: A 'community interest company' (CIC) was established by residents to collect and manage contributions from residents and private benefactors. The company entered into a bespoke contract with the Environment Agency, whereby the company agreed to contribute a fixed sum of £65,000 and in return the EA committed to deliver the scheme. Full funding was provided up front by FDGiA from the RFDC, on the understanding that the £65,000 community contribution would be collected and repaid into the FDGiA budget following completion. West Berkshire Council funded and delivered specific elements of the scheme separately. Future maintenance of the bypass channel will be funded by the Environment Agency through its revenue budget; supplemented by an agreement by residents to undertake additional maintenance works.

Solution: Residents formed a flood committee which engaged and worked with the Environment Agency, the Local Authority and RFDC to reduce flood risk. The flood committee investigated the option of raising funds for improvement schemes themselves, but the total cost of required works was beyond their resources. They therefore contacted the Chairman of the RFDC to propose a joint funding approach between the residents of Bucklebury, West Berkshire Council and the Environment Agency. This approach has enabled funding for a number of projects to reduce both surface water and river flooding. The main element of the scheme was the design and construction of a new river bypass to divert excess water flow around the village during an extreme flood event. A combination of other culvert and ditch improvements, spillways and storm drains have also formed part of the overall works to raise the standard of protection for the village.

Bucklebury Flood Alleviation Scheme (2007-10)

Partners and beneficiaries

Partners	Motivation
Environment Agency	Reduce flooding of properties.
Local authority (West Berkshire Council)	Reduced flood risk to residents (hence reduced potential cost of future damages), also involved in its role as Highways Authority.
Residents (CIC)	Reduced flood risk to properties.
Additional beneficiaries	**Benefits**

Green highlight = funding partner
Yellow highlight = contribution in kind

Bucklebury Flood Alleviation Scheme (2007-10)

Partnership arrangements and approach

Leadership: The village had a history of flooding and residents were strongly motivated by the desire to reduce the risk of future flooding, particularly after recent events caused significant damage to private properties and community facilities. This created a community commitment that was a fundamental driver for the scheme's success. The residents were unable to fund the full cost of the scheme, and because both main river and surface water flooding were involved no one organisation had the authority to deliver all the necessary works. Residents therefore approached the RFDC, Environment Agency and local authority with proposals for collaboration and joint funding.

Identifying and motivating partners: The Environment Agency was best placed to project manage the main river elements of the scheme because of its experience and authority. It was able to organise the FDGiA funding application process and has access to more cost effective procurement routes than would have been available to the CIC. It would not have been able to progress the scheme so quickly or possibly so effectively, however, without the initial worked up proposals and detailed local knowledge provided by members of the community. The contract between the CIC and the Environment Agency was drawn up between the two partners specifically for this scheme, and going through this process helped to develop an excellent understanding between them. Standard contract terms were avoided out of respect for the community's desire for clear, accessible terminology to allow everyone involved to understand what had been agreed. To this end the contract was based on simple statements reflecting the specific actions and commitments of the two parties, and this approach helped to engender a spirit of trust and openness which contributed greatly to the success of the project.
West Berkshire Council undertook aspects of the scheme requiring investment in its own assets, namely improvements to ordinary watercourses and highway culverts/spillways. The Council was the most appropriate partner to lead these elements because of its powers under the Land Drainage Act. Its commitment to undertake these works was confirmed in writing to the Environment Agency prior to the FDGiA application being submitted, in order to provide assurance to the RFDC (now RFCC) that the necessary funding would be available.

Skills and resources: Much expertise and local knowledge was provided by long term residents, but procurement and funding advice was provided by the Environment Agency. Strong leadership from certain individuals within the community was key to making this project happen.

Bucklebury Flood Alleviation Scheme (2007-10)

Challenges and Successes

Generic measures of success	How demonstrated
Clear strategic purpose and aligned objectives	Community driven by collective desire to reduce risk of flooding, prompted by direct experience of flood events. Community interest company established with specific and sole purpose of funding flood alleviation works (appropriate legal agreements established).
Constructive review of performance	
Interdependence	The community group could not raise the full amount to fund the works without the Environment Agency, and FDGiA funding from the RFDC was conditional on the fixed community contribution and West Berkshire Council’s additional works. The contract between the community interest company and the Environment Agency was drawn up to tie both parties in to joint delivery.
Accountability	The community interest company was only permitted to spend funds on the flood alleviation scheme and was accountable to its four shareholders. The Environment Agency is publically accountable for its spending.
Scheme-specific success factors	**What worked and why**
Community drive and commitment	Proactive and knowledgeable individual residents to drive the scheme forwards, supported by rest of community. Affluent residents and benefactors willing and able to make significant private contributions. CIC works to engage the whole community, including residents, landowners and the Parish Council. In-depth local knowledge provided by long term residents helped make scheme a success.
Getting a head start	Residents employed a consulting engineer to develop the scheme prior to approaching other partners, to identify the work needed and how much funding would be required. This enabled the scheme to progress much faster than would otherwise have been possible.
Scheme-specific challenges	**How overcome / lessons learnt**
Compensation issues	Keeping to a minimum the compensation paid to landowners whose land is affected but who don’t benefit directly from improved flood protection – negotiation skills have been key.

Hull Flood Mitigation Investment Plan (FMIP)

How the FMIP came about:

Hull City Council had already established an Integrated Strategic Drainage Partnership (ISDP) chaired by its Chief Executive and comprising high level representation from the other organisations with a responsibility for local flood risk management (those which would now be classed as risk management authorities under the FWMA). The ISDP board meets quarterly to discuss flood risk management needs and programmed works by each organisation, and through these discussions they agreed that it would be of great value to have a shared investment plan to draw together information on all sources of flood risk and all proposed measures by the various organisations, to ensure that all risks were being addressed and identify any gaps or areas of duplication. To this end the FMIP was commissioned, led by Hull City Council's Lead Officer for Flood Risk and a project board consisting of appropriate level representation from each of the ISDP partners. Hull CC funded the project, with contributions in kind (technical information and expertise) from the other partners.

Objectives:

Further investment in flood risk management within Hull was required in order to realise the development needs and aspirations of the city. The challenge for managers was the formulation of a prioritised and scheduled investment plan in order to help consider ways in which additional finance may be secured and maximised. The key aim of the Hull FMIP was, therefore, to develop an appropriately detailed case to enable partners to seek funding and so deliver timely solutions for mitigating flood risk within Hull City Council's boundary.

Scope of the FMIP:

- Considered all sources of flood risk - fluvial, tidal, surface water, sewer
- Worked together with those responsible (LA, water company, EA) to understand combined flood risk, and key issues, opportunities, funding cycles and constraints for each organisation
- Identified key flood risk areas
- 2-D hydraulic modelling to understand combined flood risk
- Identified what was being done by responsible organisations to reduce risk - EA strategies / plans / investment, YWS investments, HCC investments
- Considered national and local policies and strategies that will drive future investment
- Looked at solutions to reduce flood risk from sources and in areas not already covered by EA / Yorkshire Water / Hull CC existing strategies and plans
- Identified wider benefits to Hull of reduced flood risk - economic regeneration, improved standard of living, etc
- Multi criteria analysis of schemes / plans / actions to determine highest priority actions where investment should be focused
- Considered what funding was available for the different aspects of flood risk work / organisations responsible, uncertainties with this funding, and its timing
- Looked at additional funding sources that may be available in association with the wider benefits identified
- Considered risks and opportunities

Hull Flood Mitigation Investment Plan (FMIP)

Overcoming challenges:

The current financial uncertainty facing all partner organisations has made it difficult to predict long term funding availability. Flood risk management is going through a period of change, with policy developments such as Defra's partnership funding approach and the commencement of the FWMA2010 ongoing, and Yorkshire Water is also in the process of developing its new 5 year investment programme for the next AMP period.

Hull CC has also found that cross-border sensitivities regarding data sharing and responsibility for flood risk activities has been problematic on occasion. Hull CC has made efforts to overcome these issues by sharing its approach and involving its surrounding local authorities as much as possible.

Although the ISDP board identified at the start of the project what level of representation from each organisation would be required at each stage of development, inconsistent and inappropriate representation has occasionally been an issue. This is a common issue wherever large organisations are involved and is felt by Hull CC to have been minimised by the initial planning of attendance requirements.

Key successes:

The FMIP is being used successfully by the ISDP to manage and track flood risk management measures within its area of authority. The ISDP board continues to meet quarterly and progress against the FMIP is a permanent item on the agenda. Progress against the FMIP is being monitored in this way to ensure that all partners are progressing to schedule, to keep track of which funding applications need to be made when, and to ensure that any issues are picked up and dealt with as early as possible.

Partner commitment to the FMIP has been developed and maintained through the following measures:

All partners have signed up to the Formal Terms of Reference produced for the ISDP – these include a reference to the FMIP.

The FMIP project brief was developed jointly by the ISDP group and all partners were represented on the commissioning panel.

How the FMIP will be used:

- Hull City Council will use this as a living document to help plan future investment in flood risk
- to inform elected members and other decision makers of importance of reducing flood risk - the benefits this could bring
- to help in funding applications from other funding sources
- to help understand funding cycles and constraints, ensuring opportunities for partnership funding / collaboration are not missed
- The FMIP has put Hull CC in a very advantageous position with regards to their new responsibility (FWMA) to produce a Local Flood Risk Management Strategy, as it already fulfils most of the requirements for this document. Hull CC is using the FMIP and its background information to form the core of the LFRMS going forward.

Chapter six – skills and capacity

Chapter objectives

This chapter highlights the key skills and experience involved in accessing and coordinating partnership funding for LFRM, and suggests how these may be developed or accessed by LLFAs.

Chapter contents

Skills gap

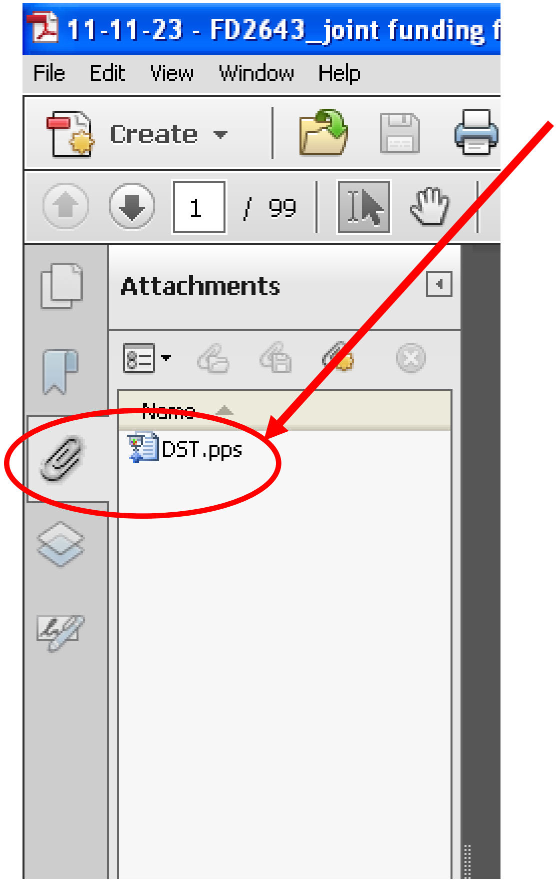
The key skills gaps identified by the survey within local authorities in relation to partnership funding relate to the practicalities of actually making joint funding a reality. A general lack of understanding of what funding sources were available, when and via which organisations suggests that LLFAs will need to research their fellow risk management authorities and other main potential partners to better understand what motivates them to invest. The survey results showed that individuals who had worked in several types of organisation tended to have a broader appreciation of different types of organisation's business drivers and regulatory issues.

Measures to overcome skills gap

Defra has an ongoing programme to help build capacity and skills within local authorities for flood risk management. This programme includes learning workshops around the country for local authority staff and it is recommended that LLFAs make the most of these opportunities to help develop the knowledge and skills needed within their own organisations. Whilst external consultants and partner organisations can supply many of the skills needed, it is important that the LLFA has a degree of self-reliance in order to provide leadership, continuity and maintain an overview role. Much of the delivery of the LFRMS can be delegated to other organisations; however, the overall responsibility for preparing, monitoring and reviewing the LFRMS cannot be delegated and remains with the LLFA.

Type of skills and experience required, and options for providing these

Activity	Skills / attributes	Options for providing skills
Motivating other risk management authorities to participate and contribute	Negotiation/persuasion Understanding of other organisations' drivers Knowledge of relevant funding cycles Communication skills Interpersonal skills Stakeholder management	An appropriately skilled and experienced Local Flood Risk Manager (or equivalent) within the LLFA would be best placed to undertake this role.
Maximising 'fundability' of measures	Knowledge of wider benefits of LFRM Knowledge of options assessment methods which can incorporate non-tangible benefits, e.g. multi-criteria analysis Local knowledge	Local Flood Risk Manager (or equivalent) within the LLFA. RMAs (especially the Environment Agency) and other partners could advise and support. External consultant could potentially be employed to advise or to undertake this on the LLFA's behalf.
Identifying and accessing potential funding sources	Entrepreneurism Awareness of wide range of funding sources Understanding of local authority finance Understanding of cost benefit appraisal	Local Flood Risk Manager (or equivalent) within the LLFA, supported by local authority Finance Officer. Environment Agency can provide advice and support. External consultant could potentially be employed to advise or to undertake this role on the LLFA's behalf.
Managing cost effective delivery of measures in the LFRMS action plan	Programme and contract management Understanding of procurement issues Technical grounding in LFRM	Local Flood Risk Manager (or equivalent) within the LLFA. Other Risk Management Authorities could manage their own programmes but overall coordination role will be needed. External project management consultant could potentially be employed to advise or to manage the programme on the LLFA's behalf.



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