

Communication and engagement in local flood risk management





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Communication and engagement in local flood risk management

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Communication and engagement in local flood risk management

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Foreword

We hear a lot about involving communities in decision making for many aspects of our lives. This guide does not emerge from a dogmatic imposition of community empowerment but from an understanding that flooding hurts communities and that the people in those communities need to be involved in understanding it, preparing for it and reducing its occurrence and its impact.



Like many other problems that we have to deal with, engaging communities involves people, processes and techniques, and as is generally the case, the people aspect is the most important. This guide sets out a framework for planning, achieving and improving communication and engagement with communities. It also advises on the techniques that can be used within that framework (with further detail in the companion guide), but its most important message is that communicating and engaging is between people, not organisations, and engaging individuals is key to success.

During the preparation of this guide I have been inspired by meeting people who have risen through their communities to provide leadership to mobilise those communities and to get action from external bodies that can to make a difference.

It has been an interesting project to chair. The project steering group (PSG) involved a wide range of voices and disciplines. Getting good engagement and communication across those was a sample of the challenges involved in the bigger task of engaging whole communities. The members of the PSG worked hard to provide expertise and guidance to the project. I hope that they gained from the experience in understanding a bigger picture than they had before.

The project team had to resolve the challenge of getting the disparate experience into words that would satisfy everyone. Together we re-discovered the importance of how things are said as well as the content. We recognised communicating with communities and not necessarily to them is important and that successful community engagement is to be achieved not delivered. We may not have got every single word right, but we hope that the message is clear.

Producing the guide was a challenge and communicating and engaging with communities will also be a challenge, but the guidance includes many case studies that show what can be achieved, the benefits and rewards that it brings to everyone. It is worth the effort.

Martin Osborne

Mouchel

Chair, Project Steering Group

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1 Introduction

This section

- ◆ Describes who will find this guide helpful.
- ◆ Describes opportunities to use this guide.
- ◆ Describes what the guide does not cover.
- ◆ Outlines the structure of the guide.
- ◆ Introduces and summarises the communications and engagement framework.
- ◆ Summarises the case studies included within the guide.

1.1 Purpose and users of this guide

This guide provides practical help to lead local flood authorities (LLFAs), risk management authorities (RMAs), and other authorities with responsibilities, for managing local flood risk. It is relevant to practitioners in England, Wales, Scotland, Northern Ireland, and Ireland.

Users of this guide may include, but are not limited to, flood risk managers, drainage engineers, planners, those working in customer services, and communication and engagement professionals from:

- ◆ LLFAs
- ◆ district authorities and other local authority (LA) organisations
- ◆ sewerage undertakers
- ◆ other RMAs (eg internal drainage boards)
- ◆ national government, national regulator, strategic bodies
- ◆ environmental regulators
- ◆ consultancies.

1.2 When this guide will be helpful

This guidance is here to help. It is not meant to be prescriptive nor definitive but it does draw together vast experience and ideas that have been tried and tested.

This guide can be used at several stages of managing local flood risk including:

- 1 Building engagement and awareness.
- 2 The preparation of a local flood risk management strategy (LFRMS) or a surface water management plan (SWMP).
- 3 Recovery after an event.
- 4 When any LFRM project or scheme is being planned.
- 5 When a new development is planned that might influence flood risk.
- 6 Partnership working situations (eg SWMP) to provide commonality and fairness of approach.
- 7 Benchmarking activities.

The guide will also be useful in identifying, engaging and working with people likely to be affected by flooding or integral to its future management. Many of the skills necessary for good communication and engagement may already exist within your organisation (see [Section 3.2](#)), so investigate what support is available before getting started. Regardless of whether you are new to LFRM and/or communication and engagement, this guide should support your role as an 'intelligent client' to co-ordinate communication and engagement in local flood risk management (LFRM).

1.3 What the guide does not cover

This guide is not intended to provide support during the emergency phase of a flood event. A great deal of work has been undertaken in relation to emergency planning, incident management and civil contingencies, and is well documented across a wide range of sources. A list of further reading is provided at the end of the guide.

1.4 Structure of the guide

Chapter 2: describes the scope of flood risk management, provides examples of how to better communicate what flood risk means.

Chapter 3: covers definitions of ‘communication and engagement’ and highlights how this can be usefully delivered and how to overcome potential challenges. It also summarises why the framework approach is helpful.

Chapter 4: explains the communication and engagement framework in detail, its underpinning principles and identifies the required skills for undertaking communication and engagement. It also presents a range of potential examples where the framework will be useful

Chapter 5: describes the communication and engagement techniques that can be used in managing local flood risk, identifying the input required and the associated opportunities and constraints.

The supporting companion guide CIRIA C752 *A guide to communication and engagement techniques in local flood risk management* gives more detail on the techniques and their use.

1.5 Case studies

Every project of communication and engagement for LFRM will be different because of the local context. **Table 1.1** summarises the case studies used throughout the guide to illustrate the wide range of projects.

Table 1.1 The case studies

Case study		Multifunctional wetland park, Beam Parklands, Dagenham, London	A community flood plan for Purley, London	Northallerton Flood Alleviation Scheme, Yorkshire	Community sustainable drainage systems scheme, Hackney, London	Green Streets, Portland, Oregon, USA	The use of pre-existing groups in community emergency flood plans, Cumbria	Developing a community resilience plan, Wycombe	Delivering a household level property protection scheme through an inclusive communication and engagement plan	Lincolnshire prepares for coastal flooding	Effective communication and engagement to raise awareness of flood risk, Shropshire, UK	Greening streets in Norwood, London
Issues covered		3.1 p15	3.2 p17	3.3 p19	3.4 p20	3.5 p21	4.1 p29	4.2 p32	4.3 p35	4.4 p37	4.5 p38	5.1 p51
Location	Urban	✓	✓		✓	✓		✓				✓
	Rural			✓			✓	✓			✓	
Type of flooding	Surface water		✓	✓	✓	✓	✓	✓				✓
	Groundwater			✓			✓	✓				
	Ordinary watercourses			✓			✓	✓				
Timing of flooding	Newly flooded								✓			
	Previously flooded			✓	✓	✓				✓	✓	
Type of activity	Plan-making		✓				✓					
	Flood warning campaign		✓					✓		✓	✓	
	Development of practical measures	✓		✓	✓	✓			✓			✓
Community ownership of LFRM	High	✓	✓		✓	✓	✓	✓			✓	✓
	Low								✓	✓		
Scale of LFRM intervention	Large	✓	✓	✓		✓	✓	✓	✓	✓		
	Small				✓						✓	
Practical examples	Building and engagement awareness	✓	✓	✓	✓	✓	✓	✓		✓		✓
	Recovery after a flood event			✓							✓	
	Preparation of LFRM Strategy		✓				✓	✓				
	When a LFRM project is planned	✓		✓	✓	✓			✓			✓

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2 Understanding local flood risk

This section

- ◆ Provides an overview of local flood risk management.
- ◆ Provides illustrations of how to help people better understand flood risk.

2.1 Local flooding

Local flooding is defined as flooding from surface water and from groundwater, or ordinary watercourses happening as a result of heavy or prolonged rainfall.

2.1.1 Surface water flooding

The main origins of surface water flooding are from drainage systems, runoff from land, ordinary watercourses and ditches. It usually happens during and immediately following heavy rainfall. Surface water flooding often occurs very quickly, sometimes in areas remote from watercourses and where flooding has not happened before.

By its nature, surface water flooding is extremely difficult to predict. In urban areas, the probability of surface water flooding is usually dependent on the capacity of underground (and out of sight) drainage systems, or sewers and how well they are maintained. This means that the risk of surface water flooding in a particular area may not be apparent to the community, making it difficult for people to accept they are vulnerable and making engagement more challenging. Equally, local peoples' own role in increasing the risk of surface water flooding may be an issue and difficult to manage, for example an increase in impermeable areas to provide driveways.

2.1.2 Groundwater flooding

Groundwater flooding is less immediate and likely to occur a significant time after heavy or prolonged rainfall. Groundwater flooding is characterised by three main features (Environment Agency, 2004):

- 1 It will usually occur days or even weeks after heavy rainfall, lulling a householder into a false sense of security.
- 2 It will last a long time – often several weeks, months and sometimes years.
- 3 It does not always emerge where you would expect, such as on hillsides.

2.1.3 Ordinary watercourse flooding

Ordinary watercourse flooding occurs when water overtops the banks of the stream. This can occur because there is more water draining into the channel than it can hold, or because it is blocked. Local flooding only refers to flooding from ordinary watercourses, which are small ditches and streams. Flooding from larger rivers and streams, officially classed as Main Rivers, is not local flooding.

2.1.4 Interactions between local and other flooding

Sewer flooding happens when the sewerage system cannot accommodate the amount of rain and sewage

trying to flow through it. This leads to sewage being surcharged from manholes and gullies. The lack of capacity can be caused by the system not being able to cope with the amount of rainfall and sewage, or it can be caused by blockages and collapses in the system.

2.1.5 Interactions with flooding from rivers and the sea

Local flood risk cannot be considered in isolation. Often surface water drains lead to outfalls that discharge in to a river or the sea. If the water levels are high the outfall will be closed and could cause surface water to back up through the system. Another example is how high groundwater can cause seasonal streams to appear. Proper consideration of local flood risk includes the interaction with rivers and the sea even though rivers and the sea are not strictly included in local flood risk.

2.2 Scope of flood risk management

LFRM involves analysis, assessment and actions to reduce flood risk from local sources of flooding. Within England and Wales the LLFAs are primarily involved with managing the flood risks from these sources. Flood risk management is important in ensuring that people, property and livelihoods are protected and the country can continue to operate effectively. Climate change, local economic vitality, development and environmental pressures and achieving social well-being provide organisations with both a reason and responsibility for flood risk management (FRM). This presents a complex set of challenges.

For the purposes of this guide FRM includes:

- ♦ analysing flood risk – does the risk of flooding exist and where?
- ♦ assessing flood risk – what is the scale of the flood risk and where?
- ♦ managing or reducing flood risk – what can be done to manage or decrease flood risk and where?

The intended outcomes of flood risk management include:

- ♦ preventing loss of life or serious injury
- ♦ reducing vulnerability by increasing resilience
- ♦ reducing the impact of flooding
- ♦ raising awareness of flood risk and improving education, reducing insurance premiums and enhancing the built and natural environment
- ♦ encouraging communities to become more involved, eg local flood forums, champions.

Communication and engagement is important to all of these outcomes and plays a vital role in a number of flood management activities. These include:

- ♦ plan making (eg LFRMS and SWMP)
- ♦ flood warning campaigns
- ♦ working with communities
- ♦ delivering practical measures, eg flood alleviation schemes, sustainable drainage systems (SuDS).

2.3 Understanding flood risk

Flood risk is a combination of the likelihood of flooding happening and the impact that it will have if and when it does happen. To help gain support for any future initiatives, it is important that stakeholders and local communities understand what this means and why.

2.3.1 Likelihood

The likelihood or chance that flooding will occur can be expressed as the likelihood in any one year – the percentage annual probability.

Communities may struggle to understand this and will ask what a one per cent probability of flooding really means for them when they have not been flooded for the past five or 10 years. Referring to return periods, eg a one in 100-year rainfall event or 100-year flood may be confusing as many people may assume it means it will not happen again for another 100 years. Such an event has a one per cent probability of occurring in any year – irrespective of whether it occurred the previous year or the previous week.

A good way of communicating flood likelihood using everyday examples of chance and probability is illustrated in **Table 2.1**. Importantly, research has shown that communicating potential impacts of flooding rather than the likelihood of it occurring will often motivate people and communities to take action.

Table 2.1 Communicating flood likelihood (from Environment Agency, 2009)

Event description	Chance	Probability (%)
A 1 in 30 chance of flooding in any one year	1 in 30	3.3
Three numbers on a standard lottery ticket (winning £10)	1 in 56	1.8
A 1 in 100 chance of flooding in any one year (a one in 100 year event)	1 in 100	1
A 1 in 1000 chance of flooding in any one year	1 in 1000	0.1
Four numbers on a standard lottery ticket	1 in 1032	0.1

2.3.2 Impact

Impact can vary significantly to include loss of life, damage to property, having to live in temporary accommodation or increased insurance premiums (Environment Agency, 2009). Vulnerable groups at risk (including retirement homes, hospitals, schools, families with vulnerable members, the socially disadvantaged, and caravan sites) will need particular consideration.

Flooding can also affect how an area is perceived both by local residents and potential ‘incomers’. For example businesses who are considering locating in the area, or tourists. There are important implications for the vitality, reputation and general quality of life in an affected area.

Key messages...

- LFRM involves analysis, assessment and actions to reduce flood risk from local sources of flooding.
- Local flooding is defined as flooding from surface water, groundwater and ordinary watercourses.
- Flood risk is a combination of the likelihood of flooding happening and the impact that it will have if and when it does happen.
- To help better manage flood risk, it is important that stakeholders and local communities understand the risk of flooding.

3 Overview of communication and engagement

This section

- ◆ Provides an overview of approaches to effective communication and engagement.
- ◆ Highlights the benefits of communication and engagement.
- ◆ Explains how communication and engagement can help the local community manage local flood risk and develop multiple benefits.
- ◆ Suggests approaches to overcoming challenges to effective communication and engagement.

3.1 Communication and engagement

Genuine engagement with stakeholders is at least a two-way process. Some consultation processes fail because the outcome has already been decided and subsequent consultation is seen as a formality for accepting the decision – the so-called ‘decide, announce, defend’ (D-A-D) approach. Early discussions and engagement will lead to a better outcome – the ‘engage, deliberate, decide’ (E-D-D) process.

A useful introduction to the difference between these approaches and the benefits of the E-D-D approach are given in an internal document from the Environment Agency (2013).

There are various levels of interaction with stakeholders and communities that can be grouped together under ‘communication and engagement’. These range from dissemination of information, with limited communication flow and interaction, to collaborative approaches between those managing flood risk and communities that need to achieve shared objectives, build trust, local skills, knowledge, resources and ownership of solutions.

Academic theory provides supporting information on communication and the degrees of engagement it offers, which includes the International Association of Public Participation (IAPP) and Wilcox (1994). Different levels of communication and engagement (often five) have been identified although the titles vary. The different levels are summarised in the [Table 3.1](#).

Definitions

Communication: this is used as an umbrella term in this guide, which includes a breadth of communication methods ranging from simple giving of information to the most engaging and participatory methods of communication with information being sent from and received by a project team empowering stakeholders and communities to take action.

Engagement: describes an active, involvement with stakeholders in the management of local flood risk. We use the term ‘communication and engagement’ to refer to the whole spectrum of interaction. When working with different stakeholders language and vocabularies are important and it is important for participants to share a common understanding of the terminology and what their role entails.

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Table 3.1 Common terms used for communication and engagement

IAPP	Wilcox (1994)	Environment Agency (2013)	Description	The promise
Informing	Information	Providing to others	Helping people to understand the risks or informing people what is planned to mitigate them	We will keep you informed
Consulting	Consultation	Receiving from others	Understand interests, concerns and the local situation. Offering a number of options and listen to the feedback received	We will keep you informed, listen to and acknowledge concerns and aspirations and provide feedback on how input has influenced the outcome and/or decision
Involving	Deciding together	Collaborating	Encouraging others to provide ideas, develop a shared understanding and join in deciding the best way forward	We will work to ensure that concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how input influenced the outcome and/or decision
Collaborating	Acting together		Working in partnership to carry forward the best approach	We will look to partners for advice and innovation in formulating solutions and incorporate that advice and recommendations into the outcomes and/or decisions to the maximum extent possible
Empowering	Supporting independent community interests		Helping others to do what they want, with support from the resource holder	The advice will enable partners to implement their decisions

Figure 3.1 defines the five varying degrees of engagement (inform, consult, involve, collaborate, empower) used in this guide. Chapter 5 and the companion guide CIRIA C752 provide further information on techniques available for each degree of engagement and communication.

	Inform	Informing stakeholders and letting them know what is going on.
	Consult	Gathering information to inform LFRM interventions. Offering a number of options and listening to the feedback received.
	Involve	Involving stakeholders to provide an opportunity for discussing and sharing ideas.
	Collaborate	A partnership approach, sharing decision making and responsibility with others.
	Empower	A community-led approach, where the community will also need to deliver.

Figure 3.1 Degrees of communication and engagement

Communication and engagement is a matter of ‘horses for courses’ and different levels can be used depending on the context (nature and scale of the challenge or opportunity). It is not always necessary or best to adopt the highest level of engagement. The right approach requires careful consideration and this guide, and particularly the framework, should help you make the right decisions.

LLFAs and other RMAs (eg sewerage undertakers, Internal Drainage Boards (IDB) and the Environment Agency) will often lead communication and engagement on local flood risk. Collaboration and partnership working is important and often a regulatory requirement. This highlights the need for agreement and clarity on communications and engagement and allocating responsibility for the process.

3.2 Deciding how, when and who you engage with

The basis for these decisions lies in the process of developing a framework. Full details on shaping the framework are given in [Chapter 4](#) together with an example communications and engagement plan.

3.2.1 A framework for communication and engagement in LFRM

The framework is based on existing practices and while slightly different to processes such as *Working with others* (Environment Agency, 2013), the overall approach and intention is the same and it should deliver similar outcomes.

The framework ([Table 3.2](#)) starts by considering what is trying to be achieved, then reflects on what types of communication and engagement activities are most suitable for the audience and stakeholders.

Selecting the right approach comes from having a clear understanding of the opportunities and challenges, the scope of techniques that may be required and understanding the desire of people to get involved. This helps develop a proportionate and pragmatic approach to communication and engagement

Table 3.2 Overview of the framework for communication and engagement

Part A: Define opportunities and challenges	Before you begin to communicate and engage with stakeholders it is important to fully understand the context and the LFRM challenges and opportunities. This will enable you to scope the communication and engagement activities and adopt a proportionate and pragmatic approach.
Part B: Identify stakeholders	A 'stakeholder mapping' exercise to develop a list of individuals, groups and organisations who may be affected or influence any outcomes. This is essential to identifying and evaluating who should be involved in the process, timing and tailoring your approach to match the different participants.
Part C: Prepare the communication and engagement plan	A communication and engagement plan sets out your method and approach to undertaking communication and engagement. It details who you are going to communicate with and how and when you are going to do it. It sets out the overall aim of the project, the specific objectives, the key messages, the action plan for delivery, the skills and resources needed to implement the plan, how success will be measured and how progress will be evaluated and communicated. The communication and engagement plan can provide an internal or public record of your approach.
Part D: Deliver the communication and engagement plan	Constant reference should be made to the aims and objectives of the communication and engagement plan to ensure you remain focused, but be ready to adapt these as you receive feedback or the project evolves. Keep a clear audit trail and record of all activities undertaken and findings from the process.
Part E: Monitor and evaluate the communication and engagement plan	Providing people with feedback provides reassurance that the process has been worthwhile, that they should continue to participate and that their involvement adds value to the management of local flood risk.

3.3 Skills for communication and engagement in LFRM

A broad skill set is required to effectively communicate and engage with people on local flood risk. This includes skills needed for sensitivity, empathy and practical co-ordination and management of the process.

One person is unlikely to have all these skills. What is important is they work with others to ensure the skills are available within the team. It is possible that the skills and expertise you require may already exist within your own organisation (eg corporate communication and engagement team) or one of your partners.

It is important to have one person leading and co-ordinating the communication and engagement activities providing certainty, consistency of approach and messages.

Table 3.3 Skills for communication and engagement in LFRM (from Fernández-Bilbao and Twigger-Ross, 2009)

Communication and engagement skills	Definition
One-to-one skills	Building personal relationships, listening, understanding, empathy, sensitivity
In-room skills	Running effective participatory meetings, making clear decisions, working with consensus and common ground
Within-organisation skills	Influencing, pushing boundaries, making your organisation work for the situation (rather than the other way around)
Cross-organisation skills	Understanding other organisational cultures, establishing appropriate relationships, identifying common agendas
Public and community-facing skills	Empathising, dealing with anger, ensuring all voices are heard, delivering positive outcomes
Specialist skills	MP liaison, media, campaigns, design, market/social research

Table 3.3 describes a range of skills relevant to communicating and engaging in local flood risk management, drawn from a joint study looking at the practical tools and guidance required to improve responses to flooding.

Being comfortable with the emotions associated with flooding and flood risk are important aspects of the role of the person or team responsible for communication and engagement, equally with the ability to co-ordinate and manage the more technical aspects of the process. ‘Emotional intelligence’ and understanding what this conveys is also useful. What people think and feel will govern how they participate.

The skills and actions required during different phases of the project are very likely to change. Equally, where those leading on communication and engagement have limited experience, identifying actions and what is needed to be effective may only happen as the process progresses. It will be important to monitor and check regularly with the understanding that this is a dynamic process and the initiative may need to respond to feedback.

Monitoring of the communication and engagement activities (see **Part E, Section 4.6**) provides an opportunity to modify and improve the approach to communication. This combined with flexibility (see **Part C, Section 4.4**) provides a platform to understand the skills required and ensure these are adequately available for effective communication and engagement.

Information

Knowing the skills and experience in your organisation

Local authorities and other RMAs are likely to have experience of communication and engagement and may have specialist teams who can provide support and advice. They may also have established connections to existing networks that could help or be involved. It is worth checking what skills (and necessary processes) already exist within your organisation and explore previous experience and lessons learnt with your colleagues before you start.

3.4 Overcoming challenges

Communication and engagement with communities for LFRM is a relatively new challenge. This guide is intended to provide you with the confidence to prepare for communication and engagement and successfully overcome challenges and exploit opportunity. Information on the framework (**Chapter 4**) and the companion guide (CIRIA C752) will be helpful here. Some common challenges and solutions are shown in **Table 3.4**.

Table 3.4 Overcoming challenges to communication and engagement

Challenge to effective communication and engagement	Consequences of not addressing the challenge	Solution	Further Information
Lack of experience in undertaking communication and engagement	Communication and engagement is ineffective. LFRM solution is developed in isolation	Chapter 4 sets out a step-by-step framework and an example template to help you put together a communication and engagement plan. Draw on the experience or skills of those around you to help deliver an effective communication and engagement plan. On the job training for staff involved in communications and engagement. Recognise the need to recruit staff with engagement skills.	Sections 4.1 to 4.6 Framework Parts A to E
Reluctance of officers to start communication and engagement process if contentious situation exists	Communication and engagement is delayed and/or ineffective	Seek support including from elected members. Follow stages A to E of the framework and use the example template to help you put together a communication and engagement plan. Draw on the experience or skills of those around you to help deliver an effective communication and engagement plan. Ignoring contention will not make it go away and may affect the way people participate.	Sections 4.1 to 4.5 Framework Parts A to E
Lead organisation lacks communication and engagement skills	Community is unaware of what is proposed and get frustrated at lack of or ineffective communication and engagement. Limited community/stakeholder support for the project. Objections may arise. The views of a minority not representing the majority may prevail.	Consider bringing in advisors from outside of your organisation to assist in the process. Look at the techniques contained CIRIA C752 for communicating local flood risk management.	Section 3.2 CIRIA C752
Lack of preparedness and unco-ordinated approach to communication and engagement	Community and/or stakeholders unaware of how they can engage in the process and LFRM solution is developed in isolation. Communication and engagement becomes costly and you may need to start again.	Chapter 4 sets out a step by step framework and an example template to help you put together a communication and engagement plan. Identify where the process may have gone wrong and what needs to change. Understand the LFRM matters to be addressed and identify participants using stakeholder analysis and mapping before preparing and implementing the communication and engagement plan.	Sections 4.1 to 4.3 Framework Parts A,B, C
Lack of co-ordination between RMAs	A solution is not developed in collaboration with all RMAs and bad feeling and/or limited buy in from RMAs occurs.	Identify key stakeholders and how they will be engaged (see Section 4.2). Consider a governance structure to ensure collaboration between RMAs.	Section 4.2 Framework Part B
Failure to involve relevant groups or secure engagement from key parties	Community groups and stakeholders feel disenfranchised from the process.	Undertake stakeholder mapping to ensure that all necessary groups are included in engagement activities.	Section 4.2 Framework Part B
A rigid communication and engagement plan	Community groups and stakeholders are not effectively engaged. Ineffective communication and engagement plan.	Communication and engagement plans need to be flexible and adapt to changing circumstances.	Section 4.3 Framework Part C

Table 3.4 Overcoming challenges to communication and engagement (contd)

Challenge to effective communication and engagement	Consequences of not addressing the challenge	Solution	Further Information
Failure to recognise the local context and characteristics of the community	Community groups and stakeholders feel frustrated. Sections of the community not engaged.	Define the local context and the characteristics of those affected and tailor your communication and engagement plan accordingly.	Sections 4.1 and 4.2 Framework Parts A, B
Over-representation of particular groups, such as opponents or supporters of flood risk management approaches	Some groups feel marginalised and their voice is not heard. Including participants with a specific agenda may unfairly weight outcomes of research, view seeking and decisions.	For example, carry out stakeholder analysis to understand those who are most affected or have most influence. Tailor the communication and engagement accordingly to ensure a balance of stakeholder input is achieved. Weight findings to adjust any imbalance.	Sections 4.2 and 4.5 Framework Parts B, E
Lack of shared goals; this can be the case where the aims and objectives are defined solely by the RMA without reference to the needs of interest groups and the local community	Community groups and stakeholders feel marginalised or disenfranchised, and their voice is not heard.	Establish clear aims and objectives underpinning your approach to communication and engagement. Consider whether shared decision making is required. Ensure you are clear over what influence people have over the decision. Monitor the objectives as you progress to make sure they are still relevant and achievable. Provide the feedback.	Sections 4.1 and 4.5 Framework Parts A, E
Difficulties in getting stakeholders to understand and acknowledge the risk posed by flooding	Community groups and stakeholders become disengaged and disinterested.	Identify the characteristics/needs of stakeholders and use communication and engagement techniques that raise awareness, eg use visual tools that demonstrate the potential impact of flooding on stakeholders. Make the impacts of flooding directly relevant to them. Identify and use local champions who understand the flooding risk. Vary the communication and engagement techniques to reduce the potential of stakeholder fatigue.	Section 4.2 Framework Part B
Placing workshop or meeting attendees in a reactive position	Community groups and stakeholders do not feel able to influence.	Issue a briefing note in advance of meetings explaining what will happen and how they can contribute. Ask questions that establish understanding on both sides rather than 'telling' people. Empower workshop or meeting attendees to influence objectives.	Section 4.4 Framework Part D
Poorly timed engagement activities	Poor attendance.	Think about the timing of activities, eg avoid staging events during religious festivals or major sporting events, if this is relevant to or will affect the target audience. The day of the week and timing should be selected to enable as many stakeholders can attend Consider running a crèche for those with children. Note any periods of election purdah where consultation on politically sensitive issues may not take place.	Chapter 4

3.5 Principles of communication and engagement

This section sets out some basic principles of successful and effective communication and engagement with communities.

3.5.1 Early and broad

Over the years, approaches to FRM have transformed from developing engineering schemes to an interdisciplinary approach to problem solving involving a range of stakeholders and people to deliver more inclusive outcomes.

More recently, engagement with stakeholders within communities has also included work with community groups, initiatives and schools. Engagement of schools through elements of the curriculum related to the wider benefits of flood risk management initiatives, such as geography, environmental management, and climate change have the potential to generate awareness and foster interest in local flood risk management. It helps build better awareness for the future. Equally, young people can also influence what their families think and do. It is a principle well known in marketing and advertising as ‘pester power’.

3.5.2 Proportionate

The degree of engagement is often influenced by the expectations or demands of those potentially affected by flooding and should not be dictated by those with overall responsibility for LFRM. For example, people living in a previously flood affected or high risk area may want to take an active role in the decision making process and take longer term ownership, while those unaffected may not.

The level of communication and engagement should be proportionate to the scale and nature of the LFRM task. This can be influenced by:

- ◆ the stage in the flood hazard cycle (eg developing options, planning, raising awareness and preparedness and long term recovery)
- ◆ location and context
- ◆ whether or not there is a history of flooding
- ◆ the preparedness of communities to take part in the communication and engagement process.

3.5.3 Pragmatic

There may be several approaches that could work in any given situation and the approach can always be adapted later in response to monitoring and feedback. It is worth also considering the resources available. Timescales, budget and skills will all influence your approach and what can be achieved.

There are specific techniques and approaches that are appropriate for different levels of engagement and advice is provided on the merits of these techniques in [Chapter 5](#). CIRIA C752 provides further information and advice on their application.

Depending on the context, sometimes the most appropriate method of communication and engagement will be relatively small scale, such as the distribution of a regular newsletter, an internet update, or a one-off information leaflet. In other cases, the challenge or opportunity will be significant enough to require using substantial resources to promote community engagement, build partnerships or empower communities to manage their own flood risk. The framework in this guide should help determine the appropriate method of communication and engagement.

Flood risks can be difficult to perceive. People are often aware of the visible risk posed by watercourses but do not perceive the unseen risk posed by groundwater or surcharging of underground drainage systems and sewers. So the type of flood risk and people's perceptions of it needs to influence the approach to communication and engagement.

3.5.4 Iterative

Effective communication and engagement is a dynamic process that needs to respond to opportunities, challenges and feedback. Any communication and engagement activities should be flexible enough to adapt to changes in circumstances.

Ultimately, in circumstances where the local community may be responsible for actions, it is vital that they are involved at the right time, in the right way and participate in decision making. Monitoring and evaluation of techniques and their outcomes will also have an important role to play.

While rewarding, effective engagement can be resource intensive and time consuming, especially where the building of understanding and deliberation is needed. So, it may be beneficial to initially set smaller objectives so that these stages can be achieved, evaluated and used as a foundation for further work.

3.5.5 Build on what is already there

Understand who are the key influencers, local champions and heroes that are respected and listened to. It may not be necessary to initiate communication and engagement activities afresh.

This could involve working with existing community groups and local people to stress the benefits of engaging in the communication and engagement process from an early stage in the management of local flood risk.

Many areas will have some form of existing community group or organisation providing some level of social cohesion (or social capital), eg school or community environment project. These provide a route for engaging people in LFRM. Parish councillors can also provide connections to other networks.

Established local groups such as residents' associations, local charities or flood action groups are often trusted and well connected. This presents the opportunity to communicate to a larger network of people, sharing knowledge, experiences and developing trust.

Using trusted community 'voices' as communication and engagement routes can help grow local support and longer term sustained involvement in the management of local flood risk.

3.6 The benefits of good communication and engagement

Good communication and engagement on LFRM can deliver benefits to all stakeholders including those managing flood risk and the wider community. These benefits include:

- ♦ delivery of multiple benefits ([Case study 3.1](#))
- ♦ increased likelihood that communities will take actions themselves ([Case study 3.2](#))
- ♦ increased likelihood FRM actions will go ahead ([Case study 3.3](#))
- ♦ increased likelihood FRM actions will be successful ([Case study 3.4](#))
- ♦ building more effective relationships ([Case study 3.5](#)).

Case study 3.1
Multifunctional wetland park, Beam Parklands, Dagenham, London

Background

Beam Parklands is a 53 hectare multifunctional wetland park for east London sitting in the floodplain of River Beam. Green space regeneration, habitat creation, and the desire to enlarge and renew the existing flood storage influenced the vision for the project.

It is an exemplar partnership project combining FRM with habitat creation, improved access to public open space and recreation.

The challenge

It was important to make the most of the extensive but degraded floodplain and improve the quality and use of the parkland for the deprived local communities of Dagenham. Key challenges were to communicate the value of the park and the potential for enhancement, understand the aspirations of those that use the park and improve local quality of life.

Overcoming the challenge

A consultation and community engagement strategy was developed to involve schools, businesses and local residents to explore opportunities for improving the parkland. A variety of engagement methods were required tailored to the diverse stakeholders and communities affected. Activities undertaken include:

- onsite public consultation, including exhibition boards and feedback forms
- information leaflets and newsletters distributed to households in the local area
- exhibition stands at the Dagenham Town Show
- guided site walks for local schools before, during and after construction
- activity days for children, generating involvement in the design of recreation opportunities
- workshops
- community planting events
- ceremonial opening of the park.

Outcomes

- Effective communications strategy enabled hard to reach groups to be engaged.
- Engaging children in the design and delivery of the parklands.
- Multiple benefits for the local community and environment (enhanced biodiversity, high quality green spaces, greater community cohesion).
- Fostered knowledge of the natural environment and encouraged natural play.
- Encouraged community ownership of the park to minimise vandalism and anti-social behaviour.

Lessons learnt

- It was important to identify the full range of stakeholders, their interests and potential use of the parkland.
- Stakeholder management skills were essential to the success of the project, particularly given the multiple funding sources secured.
- It was necessary to use a variety of engagement methods to obtain input from the diverse communities and interested stakeholders affected by the project.
- Informal and playful engagement with schools and children was essential in obtaining feedback from children, representing one of the main user groups of the site.



Figure 3.2 Children helping to plant trees



Figure 3.3 Guide site walks for local schools

3.6.1 Delivering multiple benefits

Working with organisations with different, but interconnected interests represents an opportunity to generate multiple benefits through managing local flood risk. This should be explored during the development of the communication and engagement plan as well as the framework where opportunities and challenges are identified and stakeholders are mapped.

Often a solution will find greater support and will be easier to fund if there are multiple benefits and opportunities for partners and groups can be realised. Multiple benefits derived from LFRM interventions should be explored together with other local plans and corporate strategies and could include:

- ◆ adaptation to climate change
- ◆ increasing community resilience
- ◆ improving water quality
- ◆ improving biodiversity and the green infrastructure network (see [Case study 3.1](#))
- ◆ retrofitting opportunities to enhance street layouts, road safety, improve public (recreational) space or manage surface water to reduce flood risk (see [Case studies 3.1](#) and [3.4](#))
- ◆ developing landscape opportunities to enhance the environment and amenity (see [Case study 3.1](#))
- ◆ improving public safety, through road and traffic schemes and better designed spaces
- ◆ improving perceptions of an area (social equality, quality of life and area vitality)

3.6.2 Increased likelihood that communities will take action

Successful communication and engagement with 'at risk' communities results in better community awareness of flood risk, greater community resilience, increased preparedness, empowerment and a better understanding of how to respond to flood events. This may reduce the day-to-day responsibility placed on RMAs to deliver physical interventions. So, communication and engagement is helpful in making the best use of resources.

Communicating with individuals and community groups can increase resilience and help establish an appetite to take ownership of the problem. Good communication and engagement combined with the right level of support helps and empowers people to 'help themselves' and give communities the confidence to develop their own capacity. For example, by running flood forums, flood action groups, or establishing a network of flood wardens.

The community flood plan for Purley ([Case study 3.2](#)) shows how working together to manage local flood risk can generate community ownership and reduce the risks posed by sources of local flooding. It is also a good example of effective partnership working on communications and engagement.

3.6.3 Increased likelihood FRM actions will go ahead

Effectively communicating the reasons for and benefits of LFRM can increase stakeholder support for proposals that could otherwise be perceived as unnecessary. There may be opportunities to build local capacity, raise awareness, engender ownership, develop trust and partnerships, educate young children and develop long-term channels of communication, which all contribute to generating public support.

Many proposals however may still attract resistance and the amount of monitoring, analysis and planning needed to resolve objections should not be underestimated.

As shown in [Case study 3.4](#), by raising awareness of local flood risk, the Environment Agency and Groundwork London successfully worked with local communities in Hackney to deliver a retrofit SuDS

Case study 3.2
A community flood plan for Purley, London

Background

The Greater London Authority (GLA), Environment Agency, Thames Water, and London Councils set up a FRM programme to help communities avoid becoming flood victims. The programme encouraged communities to engage with local authorities and emergency responders to prepare for flooding and reduce its impacts. It also helps communities to respond and recover quickly after flooding.

The challenge

The highly transient communities and limited resources in London made this large-scale programme challenging in terms of communicating, engaging and getting a positive outcome from the process. The pilot community flood plan programme is overcoming this by empowering communities.

Overcoming the challenge

From the beginning, the Purley and Woodcote Residents' Association (PWRA) and Purley Business Association were responsible for developing their own community flood plan. The partners (GLA, Environment Agency, Croydon Borough Council, Metropolitan Police and London Fire Brigade) provided advice and a small budget to help deliver the plan. The community decided to develop a leaflet and a plan. The leaflet is easy to understand and visually appealing, and is designed for the local community. The plan is an in-depth guide for the Community Flood Plan Purley (CFPP) members and flood wardens on what they will do before, during and after a flood. The leaflet was launched to PWRA members and advertised on the front cover of the PWRA newsletter. It was distributed to all PWRA members with presentations from the community including elected members and partners. Over 4000 leaflets were distributed, and more were distributed to local schools as this is an approach familiar to the community.

Outcomes

- ◆ The leaflets helped the local community understand their level of flood risk and provided practical advice.
- ◆ Their involvement in the plan, empowered the community as they could determine what worked for them.
- ◆ The CFPP group has a better dialogue with partners improving FRM.
- ◆ Flood wardens receive flood risk forecasts from the Environment Agency and severe weather warnings from the Met Office and they actively monitor the local area when there is potential for heavy rain.

Lessons learnt

- ◆ Communities now have the skills to help themselves and they can have large networks for sharing messages.
- ◆ Empowering communities encourages greater discussion and proactive engagement.
- ◆ Building a new initiative takes considerable time. It takes time to understand the complexities of local FRM, for the community to determine its needs, build its organisation and define its relationships with other partners. Momentum builds with time and effort. Community members are also busy and their availability fluctuates so it helps to act quickly when they do have time.

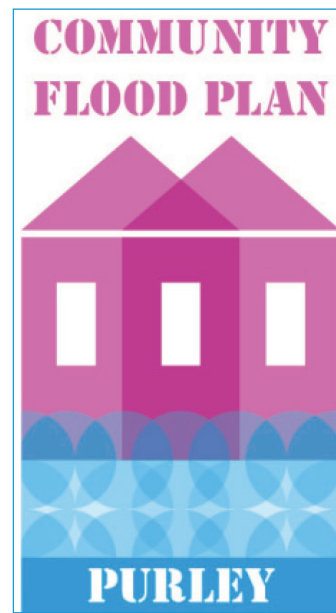


Figure 3.4 *Purley community flood plan*

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scheme. Engaging with residents generated support for the project and was a major factor in its success. Similar success has been achieved in Portland, USA, as described in [Case Study 3.5](#).

A solution will have greater support and success in securing funding if multiple benefits and opportunities for partners and groups can be realised.

3.6.4 Increased likelihood FRM actions will be successful

Working with a range of stakeholders and members of the community that have an interest in LFRM can deliver better outcomes. For example meeting accepted community needs, finding partners to manage the risk. Managing flooding from a variety of sources can be complex, communication and engagement can provide opportunities to understand the flooding and manage the flooding risk better.

3.6.5 Building more effective relationships

Openly communicating with the public at events encourages people with differing perspectives to listen to each other's concerns, share knowledge and gain understanding of local flood issues. Bringing people together can help humanise and soften the management of local flood risk and generate long-term partnerships.

Outcomes from the Humber Estuary FRMS demonstrate how the communication and engagement process builds closer ties between different estuary groups by consolidating the work being undertaken in the area. The four local authorities involved also formed stronger relationships as a result of the process (Tapsell *et al*, 2006). The importance of developing new partnerships is also presented in [Case study 3.3](#).

Case study 3.3
Northallerton Flood Alleviation Scheme, Yorkshire

Background

Following extensive flooding in Northallerton, Yorkshire, the public requested flood alleviation measures to prevent disruption and damage. Yorkshire Water worked closely with North Yorkshire County Council to review the latest floodplain risk mapping report, and prepared a forward strategy for measures to alleviate flooding in Northallerton and the adjoining villages.

The challenge

The flooding increased the community's awareness of flood risk, the public and local politicians requested urgent action to manage flood risk. The public's strength of feelings including frustration and anger were expressed at public forums. There was a need to sensitively obtain information from the public on flooding events, stimulate dialogue and obtain consensus on approaches to manage future flood risk. Yorkshire Water also wanted to improve relationships with the public and increase confidence.

Overcoming the challenge

Yorkshire Water established a flood forum enabling them to obtain input, work with other agencies, listen to their customers, understand issues and develop an integrated strategy for FRM. It helped them gain consensus from partners (councils, Environment Agency and the Internal Drainage Board) that LFRM needs to be addressed in an innovative, integrated manner.

Following new information obtained from the public flood exhibition meetings, a range of communication and engagement methods were used to address particularly sensitive areas. Yorkshire Water recognised that the approach to collect more information to understand the problem may inflame an already a delicate situation. So a new 'softer' personal approach was adopted, which included a customer-friendly letter drop in conjunction with a house to house survey and to gather the necessary information from sensitive customers.

Outcomes

- Partnership working enabled local community and organisations to agree on strategy to manage local flood risk.
- The letter drop generated an impressive 73 per cent return and this data provided a better picture of the scale of the problems. The information also helped improve understanding of flooding types and sources.
- There were improved relationships with the public and confidence in Yorkshire Water subsequently increased.

Lessons learnt

- Partnership working is a good way to improve, assess and manage local flood risk.
- Developing a forum provides a useful mechanism to obtain information and engage with stakeholders and the community.
- The flood forum required strong leadership and continuous support.

Case study 3.4
Community sustainable drainage systems scheme, Hackney, London

Background

The Environment Agency and Groundwork London implemented a scheme to demonstrate how surface water management measures can improve water quality in the Lower Lea river catchment.

The first phase involved constructing sustainable drainage systems (SuDS) (primarily rain gardens) in a number of residential and community settings within Hackney. The community SuDS scheme also demonstrated how SuDS could be retrofitted into a range of settings involving a number of partners.

The challenge

Communication and engagement was required to raise awareness about the need to better manage surface water and obtain support for the designs and overall scheme from the community as the rain gardens would be within their forecourts.

Overcoming the challenge

The communication and engagement activities involved recruiting local residents to construct the SuDS and become horticultural trainees providing learning and training in simple SuDS maintenance. Community design events and planting days were undertaken to raise awareness of flood risk and water quality challenges and encouraged them to 'green' their estates. Engagement with housing associations was required to develop and agree the project plan and implementation.

Outcomes

- ◆ The project was successful in communicating the risk of flooding and the benefits of SuDS. It has encouraged community ownership of the SuDS.
- ◆ The project also encouraged them to improve their housing estates.

Lessons learnt

- ◆ The recruitment of local residents to build SuDS and become horticultural trainees was successful in communicating the drivers and benefits of the SuDS. It also helped build local community ownership of the SuDS, ensuring ongoing maintenance.
- ◆ People were far more interested in being actively involved when they knew that one of the outcomes of the project would be a more aesthetically pleasing environment.
- ◆ Engaging with housing associations helped communicate the wider purposes of retrofitting SuDS in the community.



Figure 3.5 Community rain garden

Case study 3.5
Green Streets, Portland, Oregon, USA

Background

Portland's stormwater (surface water) management program run by the Bureau of Environmental Services (BES) began in the early 1990s in response to new legislation used to address water quality regulations and improve the quality of watercourses.

A sustainable stormwater management program was formed as the City recognised a need for both internal co-ordination and the promotion of sustainable stormwater management systems (similar to SuDS) citywide. The group's functions are multi-faceted, but they specifically include Green Streets (detailed below) and holding public outreach and education programmes.

The challenge

The stormwater management program requires the retrofitting of surface water management systems within existing developments and highways. Input and ultimately support from local businesses and residents was required to deliver improvement.

Overcoming the challenges

To overcome the challenges and deliver the programme extensive communication and engagement activities were undertaken that included:

- ◆ The creation of public and technical stakeholder groups to develop recommendations balancing the needs of street users and surface water management within a constrained area.
- ◆ Distribution of simple and engaging leaflets and flyers to the community, detailing the aims and objectives of Green Streets.
- ◆ The use of an engaging website to communicate to members of the community
- ◆ The creation of Volunteer Green Street Steward Partnerships to actively engage the community in the maintenance of the retrofitted landscape.

Outcomes

- ◆ A successful surface water management program that achieves not only regulatory compliance, but also education, outreach, and community greening and enhancement.
- ◆ Portland's municipal program is highly regarded worldwide (and has inspired similar approaches in the UK).
- ◆ A dedicated and easy to use website for the public has been developed.
- ◆ A successful partnership between the City and Portland's schools to install facilities that can manage up to 90 per cent of the surface water on site and provide educational facilities about water management.
- ◆ Using schoolyards has also helped manage sewer flooding in neighbouring houses.

Lessons learnt

- ◆ Consult with homeowners about their aesthetic preferences and expectations to ensure acceptance of approaches to manage surface water.
- ◆ A successful surface water management program requires an inter-disciplinary approach. Collaboration can also bring more resources to the table where funding might be limited.
- ◆ Members of the community should be credited for recognising the value of surface water management and for serving as advocates for projects and initiatives.

For further information visit: www.werf.org/liveablecommunities/studies_port_or.htm

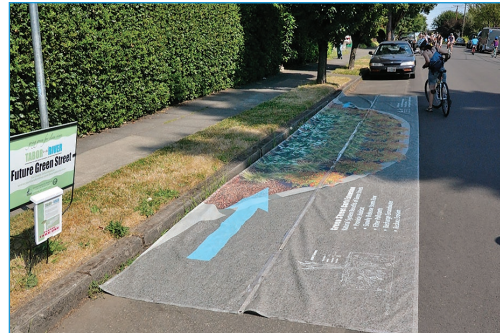


Figure 3.6 SW 12th Ave Green Street Planters (courtesy David Schofield and Portland Bureau of Environment Services)

Key messages...

- ◆ Communication and engagement ranges from giving information with limited engagement, to collaborative approaches that achieve shared objectives, trust, build local capacity empowerment and ownership of solutions.
- ◆ Communication and engagement should be proportionate and pragmatic.
- ◆ Communication and engagement is important to achieve the beneficial outcomes of LFRM.
- ◆ Successful LFRM solutions are developed with input from the affected community and other stakeholders.
- ◆ High levels of engagement provide the opportunity to improve people's understanding of local flood risk and build the communities capacity to manage local flood risk.
- ◆ High levels of engagement help develop relationships and generate public support for the management of local flood risk.

4 The framework

This section

- ◆ Sets out the framework for communication and engagement.
- ◆ Defines opportunities and challenges.
- ◆ Explains how to identify stakeholders.
- ◆ Provides advice on preparing the communication and engagement plan.
- ◆ Provides advice on delivering the communication and engagement plan.
- ◆ Explains how to monitor and evaluate the plan.
- ◆ Provides practical examples of applying the framework.

4.1 Introducing the framework for communication and engagement

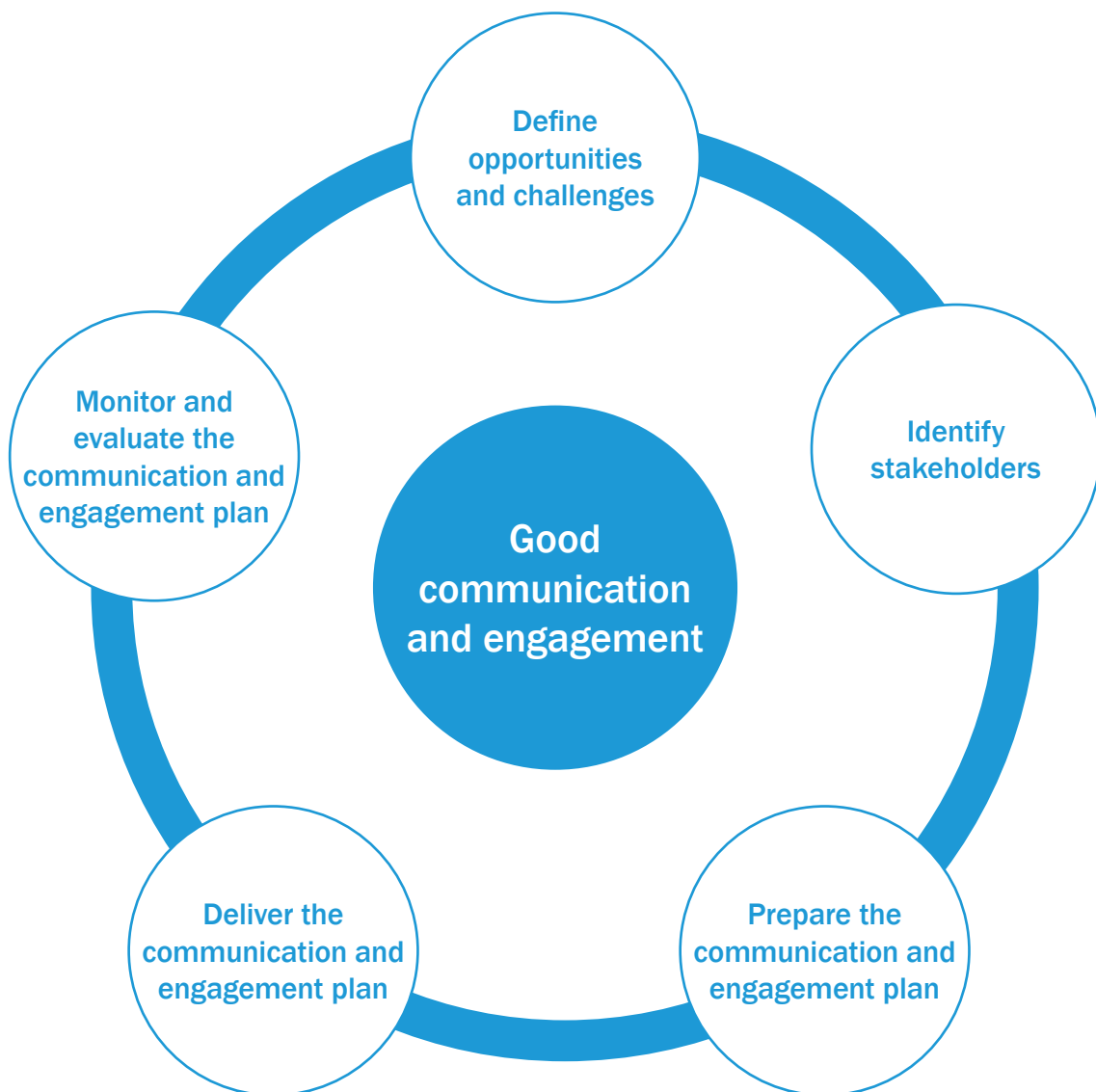


Figure 4.1 The framework for communication and engagement

Using this framework (Figure 4.1) will enable you and your colleagues to create and put into practice a robust communication and engagement strategy or plan. The framework facilitates building awareness, skills and resources in the local community, developing multiple benefits, building and reinforcing

partnerships, ownership and stakeholder support for LFRM (see [Section 3.6](#)). It responds to the challenges of RMAs and promotes a proportionate approach to communication and engagement relative to the likely scale and nature of the FRM intervention and the potential interest and role of stakeholders.

The framework comprises five parts with each part giving practical information and advice on how to carry communication and engagement. These include:

- ◆ **Section 4.2** Part A – Define opportunities and challenges
- ◆ **Section 4.3** Part B – Identify stakeholders
- ◆ **Section 4.4** Part C – Prepare the communication and engagement plan
- ◆ **Section 4.5** Part D – Deliver the communication and engagement plan
- ◆ **Section 4.6** Part E – Monitor and evaluate the communication and engagement plan

The framework is designed to be cyclical with feedback providing the opportunity for review, analysis and continual improvement in your approach to communication and engagement. As well as starting from Part A ([Section 4.2](#)), you can also dip in and out of the framework to reinforce or strengthen your existing practice.

Five practical examples have also been developed to illustrate how the framework can be used ([Section 4.7](#)). These include:

- ◆ **Example 4.1** – Raise awareness and increase engagement in LFRM
- ◆ **Example 4.2** – Recovery after a flood event
- ◆ **Example 4.3** – Preparation of LFRMS
- ◆ **Example 4.4** – When a LFRM project is planned
- ◆ **Example 4.5** – When a new development is planned that might influence the risk of flooding

4.2 Framework Part A: define opportunities and challenges

Information

Define what needs to be addressed

Before you begin to communicate and engage with stakeholders, it is important to fully understand the LFRM matters to be addressed and understand how wider issues in the community may affect people's perceptions of a project. This will enable you to scope the communication and engagement activities and adopt a proportionate and pragmatic approach.

At this early stage it is important that you work closely with the team developing the project (if you are not part of it) to understand the aim and objectives of communication and engagement activities, eg informing a LFRMS, raising awareness, or in relation to a physical flood management measure.

To help establish your approach to communication and the scale of engagement necessary, a good method is to ask yourself and others in the project team some questions to help define the LFRM opportunities and challenges, and the context in which communication and engagement may need to be undertaken. Questions could include:

- ◆ What is the scope of the LFRM project?
- ◆ What is your or other organisations' reason(s) for being involved in LFRM project?
- ◆ What are the aims and objectives of communication and engagement?
- ◆ Are there existing relationships that can be learnt from or developed?
- ◆ What is the wider project context?
- ◆ What skills are required to deliver effective communication and engagement?

Each of these questions are explored in more detail as follows.

4.2.1 What is the scope of the LFRM project?

- ◆ Consider the scope of possible flood risk management measures available – are there many options?
- ◆ Do the local flood risk opportunities, challenges and scope of measures restrict or dictate communication and engagement approaches?
- ◆ Have multiple benefits, potential synergies with other interest groups and their communication and engagement initiatives activities been considered?

Knowing the boundaries of a project helps determine the scope of communication and engagement. The solution to some local flood issues may be straightforward, such as clearing blocked culverts. The scope of the communication and engagement might therefore be limited to maintaining a culvert and telling people about this. Larger scale projects may have numerous possible solutions, each with a varying degree of impact. In this case the scope of communication and scale of engagement is likely to be wider with options being considered and developed closely with those affected, before a preferred solution is identified (see [Case study 3.1, Section 3.6](#)). Having an idea of the possible scope of solutions will help determine the amount and type of initial communication and engagement that is relevant, ensuring the approach is proportionate and pragmatic (see [Section 3.5](#)). However, it will be important to get the balance right between understanding potential solutions and ensuring that stakeholders do not believe that a decision has already been made. Stakeholders should also understand what the opportunities or constraints are in a project – what may, or may not be done and why.

4.2.2 What is your or other organisations' reason(s) for being involved in a LFRM project?

- ◆ Consider your or other organisations' reasons for being involved as well as its role.
- ◆ Will your or other organisations lead the work or will a partnership be formed for this?
- ◆ What are the statutory responsibilities of your organisation and who do you need to consult by law? What about the other organisations that are involved in local flood risk management?
- ◆ Have you, somebody else or another organisation identified the need for intervention? If so, understand why.

Consider the motives for involvement, and specific or collective responsibilities in the flood management process. The approach to communication and engagement should allow all participants, those taking part from organisations, interest groups and the community, to review their goals and interests, their assumptions about the system to be managed, and how their actions may affect others (HarmoniCOP, 2005).

You will need to understand who has overall responsibility for the flood risk management project (Sorensen *et al*, 2006). You may form part of a number of organisations leading the process or you may be an individual organisation, such as the LLFA, leading the engagement process. Either can support effective communication and engagement, but the responsibility of each participating organisation should be clear.

In addition, it is important to establish the likely degree of difficult or contentious issues that may exist, and understand how comfortable officers may be in establishing the engagement and communication process if such a situation applies. At this stage it may be useful to consider the necessary skills required (see [Section 3.3](#)).

4.2.3 What are the aims and objectives of communication and engagement?

- ◆ Aims and objectives of communication and engagement should be developed with input from all those involved in the flood risk management project.

- ◆ How are you going to demonstrate that you have met the project's objectives and how will this success be measured?
- ◆ Consider what the planned duration of the project and timescales for decision making will be.
- ◆ Consider what degree of communication and engagement is required. Do you want to inform, consult, involve, collaborate or empower (or achieve a mixture of this)? (see [Figure 3.1](#)).

Your communication and engagement strategy should feed from the aims and objectives of the project. Set out the project aims and objectives before embarking on wider engagement and communication.

Actively engage community and interest groups as early as possible. Dahlenburg and Morison (2009a) suggest that it is vital to make the community a part of the decision making process rather than just presenting them with 'professionally derived' solutions. This can include discussing the aims and objectives of communication and engagement as well as the wider project with people outside of the project team, either at the start of the engagement process or as it progresses. It would be useful to check that everyone has the same understanding, expectations and agrees on the same objectives.

While some LFRM projects will have a limited life, others will require ongoing management and maintenance. Aims and objectives and the methods of measuring success should reflect this. This might include measuring progress at defined milestones or at set times such as every year or every two years. See [Section 4.6](#) for further information.

At this early stage, when you begin to plan what communication and engagement might be appropriate, determine what success could look like, how that might be achieved and how effectiveness of the communication and engagement will be measured. This could take the form of both tangible (eg support for proposals) and intangible objectives (eg positive change in attitudes among defined groups or individuals). Use these benchmarks throughout the communication and engagement process to monitor and evaluate progress and identify where changes to approach are necessary. Success might relate to the number of individuals who have been directly engaged on a one-to-one basis, the number of people registered as flood wardens or a change in people's behaviour, such as in relation to understanding preparedness, before and after you have engaged with them. Methods of evaluation are explored in Part E of the framework ([Section 4.6](#)).

4.2.4 Are there existing relationships that can be learnt from or developed?

- ◆ Consider any potential issues that could affect working relationships, such as poor previous experiences.
- ◆ Look for opportunities to build on the work of other organisations in the future, including those not directly interested in flood risk management, which support the objectives of both communication and engagement and flood risk management project, eg schools, environmental initiatives.

When defining the opportunities and challenges, look to see what previous communication and engagement has taken place with the community so there is no duplication of work that has already been done or is underway. You may also be able to learn from past activities and understand the relationship between different stakeholders and groups. Consider tying in your communication and engagement strategy with other initiatives, such as Environment Agency consultation, so that stakeholders do not experience 'consultation fatigue'.

Understand how stakeholders are affected by local flood risk and their potential involvement, role and influence in its management (Sorensen *et al.*, 2006). While useful, it is not imperative to achieve complete consensus on all flood risk management issues – stakeholders should recognise each other's perception of the problem (HarmoniCOP, 2005) and understand their role in finding a solution.

4.2.5 What is the wider project context?

- ◆ What are the physical, social and economic characteristics of the location you are working in? What opportunities for communication and engagement do these present?
- ◆ Are you aware of any local issues or opportunities that could influence your work? For example is FRM a political issue for local councillors?
- ◆ You may want to brainstorm these ideas in a session with other stakeholders.

Think about why flood risk has been identified as an issue. Ask yourself and others questions such as:

- ◆ “Has a flood event occurred?”
- ◆ “Is there a historic problem of flooding?”
- ◆ “Has flood risk, or the consequence of flooding increased?”

If there is an historic problem of flooding, you will need to understand why the problem has re-occurred. As set out in [Section 4.1](#), the framework is iterative and self-reflecting. An understanding of the project context and local issues may develop throughout engagement and the approach should be reviewed as this understanding develops (see Part E of the framework, [Section 4.6](#)).

4.2.6 What skills are required to deliver effective communication and engagement?

A broad skill set is needed to respond to the diverse stakeholders and the emotive nature of flood risk management. At this early stage it will be helpful to understand and identify what skills might be needed to deliver effective communication and engagement – as discussed in [Section 4.2.6](#) an appreciation of the skills required will be generated by:

- ◆ understanding the scope of the LFRM project
- ◆ your reason for being involved in the project
- ◆ the aims and objectives of communication and engagement
- ◆ knowledge of existing relationships
- ◆ the project context.

See CIRIA C752 for a full set of tools and techniques that can be used in communicating and engaging in local flood risk management.

4.3 Framework Part B: identify stakeholders

Information

Stakeholder mapping

Once the issues or opportunities have been defined and an understanding of the scope of communication and engagement is appreciated, undertake a ‘stakeholder mapping’ exercise to develop a list of individuals, groups and organisations to work with. This is essential to identifying and evaluating who should be involved in the process and tailoring your approach to match the different stakeholders.

Identify stakeholders by asking:

- ◆ Who will the activities affect (positively and negatively)?
- ◆ Who might think that the activities will affect them?
- ◆ Who will, or should be involved in developing and delivering the solution? This will depend on the solution and intended objective.

- Are particular groups affected more than others, such as the vulnerable, and at different times, such as only after heavy rainfall?
- Are there existing local groups or individuals who are already engaged in the issues, or within your organisation, who can act as champions and support the project (see Case study 4.1)? Regular flood forum meetings play an important role in the development of a LFRMS. These meetings enable relevant local groups and individuals to get together, engage in the process, and define the communication and engagement strategy.
- Are there existing local groups or individuals who could help, even if they are not affected? For example, local woodland trusts may be able to supply trees for planting, or voluntary groups to help support activities.
- For LLFAs in particular, it is important to recognise the roles and responsibilities of elected members, both as portfolio holders and ward councillors. You may need to seek their approval and be subject to the scrutiny process, as well as engage with them, and work through them as a route to their communities. This also applies to senior decision makers and managers in all organisations.
- What is the role or position of the media? Do they tend to support these projects? Is there a history of contention with community groups and other organisations? Media reporting can influence how people think and respond.

When undertaking your stakeholder analysis, people you need to involve or inform can be categorised in a number of ways. One method is to use categories set out in guidance by the Environment Agency (2013) (see [Table 4.1](#)).

Table 4.1 Categories to undertake a stakeholder analysis (from Environment Agency, 2013)

Category	Considerations
Sector	Public, private, voluntary, community
Function	User, service provider, regulator, landowner, decision maker
Geography	Living within postal district Y, living in flood risk area, working in flood risk area, visiting flood risk area
Socio-economic	Income, gender, age, length of time living in area
Effect	Directly affected, indirectly affected, able to affect the work and/or issue
Understanding or experience of topic	None, low, medium, high, more than you
Known or likely position	For or against project Z

Working through each of these categories, you can create a master list of potential stakeholders. The scale of this list will vary in relation to the scale of the project. In some cases there may only be a handful of relevant stakeholders. In any case, this will ensure that all stakeholders are considered. It will also help you tailor your communication and engagement plan to meet the needs of all parties, including where stakeholders may benefit from specific methods of involvement, via familiar leaders.

Information

Encouraging community participation

“Communities offer a wide range of perspectives and experiences relating to flooding that can be invaluable in helping to create the vision and response for flood risk management. By encouraging their participation, schemes can achieve a more complete picture of flood risk and better understand and promote solutions”.

Source Welsh Government, 2011

As well as stakeholders who will be directly involved, look for other participants who can support your approach to communication and engagement. Some of the organisations and individuals you have identified may be both a ‘stakeholder’ as well as a ‘potential communicator’ and they may exist within your own organisation. An example of those who might be both stakeholders and communicators is presented in [Figure 4.2](#).

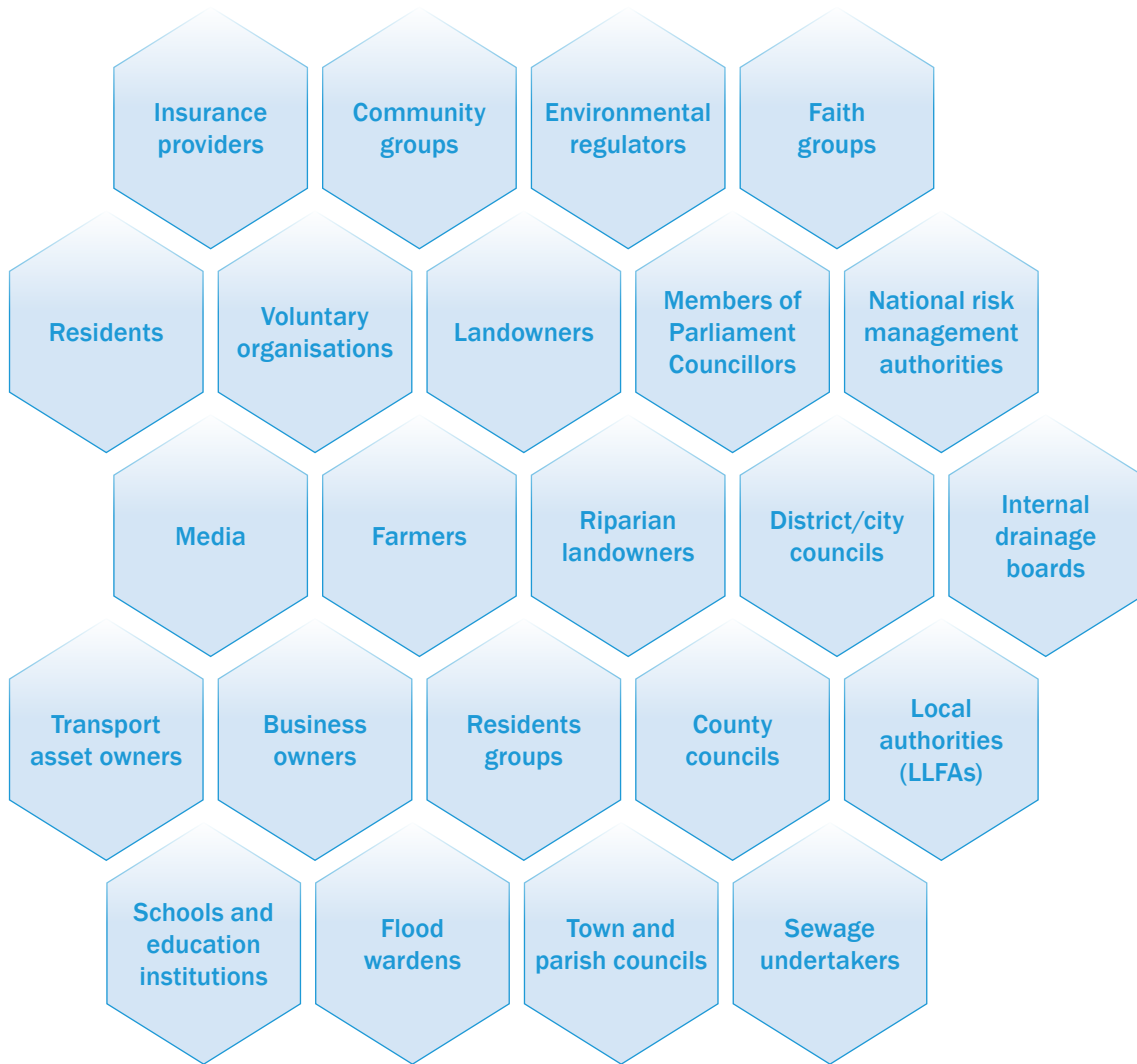


Figure 4.2 Stakeholders and communicators

Review your stakeholder list on an ongoing basis to ensure information is up-to-date. For example new action groups or stakeholders may have been created who need to be included in the communication and engagement plan, or contact details may have changed.

Case study 4.1
The use of pre-existing groups in community emergency flood plans, Cumbria

Background

A consultancy working on behalf of risk management authorities was engaging with a number of communities and partner organisations in Cumbria to develop community emergency flood plans within communities at risk of flooding.

The challenge

The initial challenge was to improve the awareness of the community to potential flood risks. It was also important to provide advice and information to enable the local community to more proactively manage flood risk. At the start of this process the community was concerned about what they were expected, or able to achieve so it was important that the community understood their role and how they could contribute to improving their resilience to flooding.

Overcoming the challenge

Methods of communication and engagement used across Cumbria included drop-in sessions, public meetings, a flood fair, media advertising campaign, and house-to-house visits. One local community had an established Community Flood Action Group (CFAG) with pre-existing links to the local community. In developing the community emergency flood plan, the CFAG was able to actively engage with the wider community and groups via existing relationships. The CFAG was also able to communicate information via their established communication channels free of charge, such as through their website, and in their local newspapers and community leaflets.

Outcomes

- Through the CFAG, with pre-existing links to the community, a wide range of community members and groups were engaged from the start of the process.
- A community emergency flood plan was created, which included input from a wide cross-section of the community.
- Effective engagement empowered the community to manage their own flood risk and their enthusiasm was appropriately organised and co-ordinated.
- The community was actively involved in managing future flood risk and they provided a funding for a flood alleviation scheme.

Lessons learnt

- It is useful to understand if the community you're working with has an existing network or group of residents that can plan for emergencies and support work to further develop a community flood group.
- Working with the community to understand their concerns is helpful to determine their willingness and competency in being actively involved in managing flood risk.
- It is important to be clear on the expectations of the community in managing their flood risk, even if it is only to raise awareness of potential flooding.



Figure 4.3 CFAG public meeting

4.4 Framework Part C: prepare the communication and engagement plan

Information

Developing a communication and engagement plan

Once you have defined the challenge or opportunity, developed an understanding of the scope of activities, and identified participants, develop a communication and engagement plan.

A communication and engagement plan sets out your method and approach. It details who you are going to communicate with and how and when you are going to do it. It sets out the overall aim of the project, specific objectives, key messages, the action plan for delivery, skills and resources needed to implement the plan, how success will be measured, and how progress will be evaluated and communicated. The communication and engagement plan can provide an internal or public record of your approach.

Your communication and engagement plan should be well prepared, realistic about what can be achieved at the local level, and contain a shared vision (Derrick, 2009). The communication and engagement plan should support an open communication process (HarmoniCOP, 2005), where:

- ◆ the participants in the process should have power to commit to the process
- ◆ the process and its management should be clear and well understood
- ◆ if there are limits to a community's influence this should be defined and explained, to ensure they are clear about what they can influence.

The approach should be flexible as 'one size does not fit all' and it may have to evolve to respond to feedback. [Chapter 5](#) of this guide provides a summary of communication and engagement techniques offering varying degrees of engagement. Also, CIRIA C752 expands on [Chapter 5](#) providing useful examples of techniques to be used as part of a tailored communication and engagement plan.

[Table 4.2](#) demonstrates what can be included in a communication and engagement strategy or plan, and how to put the framework into use (the template can be used as a guide to develop your strategy or plan). Also consider the following factors when preparing your communication and engagement plan:

- ◆ Tailor your plan to the community. Has the community already been engaged with similar issues? If so, is there scope to use existing community groups or communication and engagement channels? (see [Case study 4.1](#)).
- ◆ Ensure it is inclusive and flexible (so that everyone who wants to take part has the opportunity to do so). What types of communication and engagement are needed to get people involved and the resources (time, financial and skills) required to commit to the process.
- ◆ Where possible, test approaches with small groups before implementation.

Table 4.2 Template for communications and engagement strategy or plan

Communication and engagement plan sections	Relevance and why they are needed
The approach	<p>Examples include:</p> <ul style="list-style-type: none"> ◆ agreed project aims and objectives ◆ agreed communications aims and objectives ◆ agreed stakeholders – the ‘who, how, why and when’ ◆ agreed key messages ◆ agreed briefing notes, regularly updated, to reflect the project’s progress ◆ local issues and drivers, relevant socio-economic data
Stakeholder engagement table	<p>As a minimum, this should ask who are the stakeholders (eg internal and/or external), and ask that stakeholders have been mapped according to agreed criteria (eg against ‘influence’ and ‘impact’ axes) identifying those who may be:</p> <ul style="list-style-type: none"> ◆ directly affected but not influential ◆ influential but not directly affected ◆ directly affected and influential ◆ neither of these but with a right to have their say at some stage (regulatory requirement). <p>From this, when they will be involved in the process, why and how.</p> <p>It will also include the initial type of communication and engagement requirements for stakeholders (see Table 3.1):</p> <ul style="list-style-type: none"> ◆ inform ◆ consult ◆ involve ◆ collaborate ◆ empower. <p>This section should demonstrate an openness to include others as identified or appropriate according to a project’s status and need. This is an essential part of communication and engagement risk management.</p>
Communication channels	<p>These would need to be agreed, eg combining with existing communications networks and local groups. Appointment of key spokesperson, those who will require or provide appropriate quotes for media releases etc.</p>
Issues and risks	<p>There are numerous risks to a project such as this, including:</p> <ul style="list-style-type: none"> ◆ initial discomfort in starting the engagement process if contentious situation exists ◆ inconsistent messages causing confusion ◆ the process being hijacked by a vocal minority in the absence of a transparent Communication and engagement plan. ◆ one element of the study outstrips the other. For example communication outstrips the technical stage a study is at or vice versa ◆ ‘missing’ stakeholders, resulting in delays and questions at important junctures of the study ◆ ‘nightmare questions’ with unplanned for responses arising from the media or other stakeholders. <p>The communication and engagement plan will help identify such risks in a timely way and plan to address them.</p>

4.4.1 Tailor your communication and engagement plan

When the draft plan has been developed, tailor and match the communication and engagement plan and approaches to the characteristics, behaviours and perceptions of the stakeholders affected by the project.

Involve and learn from colleagues from other areas of your organisation (or other partners) who may already have experience of which techniques work best with your communities. Many RMAs have a very good understanding of their local population and will hold a wide variety of data that can be used to help tailor your communication and engagement plan. For example this may include information on local demographics, lists of existing community groups or pertinent local issues that might influence your approach to communication and engagement (but can also allow you to identify opportunities for multiple benefits).

Depending on existing relationships, time may need to be devoted to networking and building up trust (HarmoniCOP, 2005). The communication and engagement plan should reflect this. Creating the perception as well as the reality that engagement in the communication process is beneficial to people, giving them the opportunity to fulfil some of their own interests and demands can help improve relationships. Value the contribution of community groups and make efforts to ensure that community groups are treated as partners in LFRM.

4.4.2 Use existing community groups

Identify a community flood champion or group of flood champions to support project goals, if appropriate and proportionate to the scale of the LFRM intervention. In the case of Wycombe (see [Case study 4.2](#)), enthusiastic parish councillors were encouraged to write plans. These individuals can be empowered to monitor potential problems, and alert local communities, yourself and other relevant organisations when a potential issue arises.

Case study 4.2 Developing a community resilience plan, Wycombe

Background

Parts of Wycombe District Council's area have the potential for flooding from fluvial, groundwater and pluvial sources, affecting 1000 properties. The community resilience plan project was launched as part of a county-wide initiative, in partnership with the Environment Agency, to encourage communities to plan for potential flood incidents.

The challenge

The initial challenge was getting the residents and businesses to accept that there was a flooding risk in the area. Concerns over property blight and insurance had meant that some of the community was reluctant to get involved. Community resilience plans needed to be developed with support from the community to better prepare for, manage, and recover from flooding.

Overcoming the challenge

Key community members were asked to become local flood champions. Initially enthusiastic parish clerks were encouraged and supported by developing community resilience plans. These were used as good practice as part of training and information sessions at parish meetings. Through localised community engagement the champions targeted rural communities within their parishes, ensuring that residents had a say in the development of the community resilience plans.

Further community resilience plans have been encouraged by providing support to the champions in writing their plans and holding regular meetings with them, which are also attended by other partners from the resilience community

Outcomes

- Political support was obtained for the community resilience plan.
- The initial work of the champions was recognised as good practice through the National Association of Local Councils (NALC).
- This initial work has subsequently been taken up by other community groups across the district and the Council has actively encouraged and supported the development of further resilience planning in both rural and urban areas.
- The community plan was also used to reduce the effect of subsequent flooding.

Lessons learnt

- Start initially with a manageable template plan and encourage development as the community becomes more aware and involved.
- If it is not possible to identify a champion early in a project, it may be helpful to set this as an objective of the communication and engagement plan instead.
- Use champions to help support others interested in starting the process.
- Sceptics of community resilience plans can often be convinced when they see a plan being used effectively in an emergency.

4.4.3 Ensure the plan is flexible and inclusive

The communication and engagement plan is a living document and should be flexible and managed to appropriately engage with different members of the community. Part E of the framework ([Section 4.6](#)) discusses the need to monitor your communication and engagement plan as the project progresses, making changes to your approach where needed.

Information

Making sure you have an inclusive communication and engagement plan

- Ensure that meeting places are in close proximity to the community and take into account those without access to a car. Disability access must be considered.
- Consider the time of the day you are holding the engagement events. Many people will not be able to attend daytime events due to work commitments, so you may need to also provide evening or weekend events.
- Make sure the process is open and accessible to all people.
- The diversity between and within community groups can be substantial and needs to be reflected in approaches to inclusive community engagement.
- Look at the potential impact of holiday periods and religious festivals.
- Language barriers could exist and so translators may need to be present at exhibitions.
- Consistent dissemination of information ensures a fair and open process.
- Present materials in different formats and media. People have different information needs.
- Ensure the size and choice of font for text is appropriate (font size in 12 point is preferable, 11 point should be the minimum).
- Use of appropriate language – use simple language and style to help with ease of reading.
- Give consideration to making information available in other languages and formats, ie braille.
- Ensure the timescale for consultation is not too short.
- Make use of social media networking and online networks where appropriate, such as setting up a Twitter account, a blog or Facebook page. These can alert people of flood risk, share information, keep communities up-to-date, and provide a medium where individuals can share their own thoughts and engage in discussion.

For further information on ensuring inclusivity, see the CIRIA C752.

The Royal National Institute for the Blind (RNIB) has produced a web accessibility statement, which can be found at: <http://tinyurl.com/22jk3tt> (accessed 30/01/15)

Understand and adapt to the way different community groups are organised. The lead organisation should ensure that all members of the community and other interest groups have an opportunity to attend or contribute to a LFRM event. There should also be a collaborative approach across the risk management authorities.

Use more than one technique to communicate with people through the lifetime of a project. This should help engagement with a wider community with diverse needs and avoid consultation fatigue.

4.4.4 Ensuring there are appropriate resources and skills available

Chapter 5 details the different techniques that can be used to communicate and engage with people. The communication and engagement plan should be supported with the appropriate resources and skills to deliver it. Part A of the framework ([Section 4.2](#)) explains why you need to consider what skills and resources will be required following a review of project opportunities and challenges. [Section 3.3](#) provides further details on relevant skills and explains how they may already exist within your organisation.

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Information

Practitioners' views on skills

This list has been collated from various views of water companies, voluntary organisations, LLFAs and RMAs. You may find the following skills and behaviours useful when undertaking your communication and engagement exercise:

- Confidence and experience in public participation.
- Capacity to integrate local community knowledge and that of other groups.
- Trustworthiness and independence of the facilitator.
- Capacity to deal with different organisations, members of the community and resources.
- Competence in language and managing dialogue. This includes the ability to translate technical elements of the risks, challenges and opportunities.
- Provide information in a way that can be understood by the wider community. Use plain language where possible, the use of overly technical language should be kept to a minimum.
- Ability to listen to what others have to say. You will need to be respectful, empathetic, engaging and responsive when working with the local community.
- Flexible to meet local situations.
- Commitment to the process.
- Transparent and honest throughout the process.
- Approachable and accessible.

4.5 Framework Part D: deliver the communication and engagement plan

Information

Deliver the plan

When delivering the communication and engagement plan constantly refer back to the aims and objectives of the plan to ensure you remain focused. Also, be ready to change these as the project evolves. Keep a clear audit trail and record of all activities undertaken and findings from the process.

This section provides an overview of the key factors to support the successful delivery of a communication and engagement plan, which would need to be monitored (Part E of the framework, [Section 4.6](#)).

[Chapter 5](#) of this guide details the different techniques that can be employed to deliver your communication and engagement plan. This is important in order to produce an inclusive communication and engagement plan, which engages a range of stakeholders (see [Case study 4.3](#)). [Section 3.3](#) suggests the skills you might need to deliver your communication and engagement plan. When delivering your communication and engagement plan it will be important to simplify complex messages and use empathetic approaches so stakeholders remain engaged.

Case study 4.3
Delivering a household level property protection scheme
through an inclusive communication and engagement plan

Background

A partnership comprising the Environment Agency, a local authority (LA) and two members of a flood action group were tasked with delivering a household level property protection scheme funded by Defra, across several communities at risk of fluvial flooding.

The challenge

It was important that at each stage of the project people understood what was happening and why. There were multiple stakeholders involved, a diverse mix of residential and domestic properties and also a variety of different people to consider and engage with.

It was important to treat each property on an individual basis to ensure every aspect of flood risk is explored and products are offered that are suitable and fit for purpose to both the property and resident. However, it was also important to obtain support from neighbours for property protection that may be required for a number of properties within an area. In some cases a contribution from the property owner was required and this raised challenges around discussing and agreeing appropriateness and affordability of some of the protection measures.

Overcoming the challenge

Based on previous experience of the partnership a number of methods were undertaken to ensure an inclusive engagement process. Dissemination activities were often undertaken in large groups. In some cases work to empower stakeholders or encourage them to financially contribute to protection measures were undertaken on a one-to-one basis in drop-in sessions. Other approaches included:

- Weekly newsletters were issued to all residents informing them of developments and what they needed to do next.
- Flood drop-in sessions were held during the day and in the evening to ensure that local businesses who struggled to attend daytime meetings were able to do so.
- Taking into account the complexities, individuals and businesses were approached with information on the protection measures at a time that suited them, meaning the community paid far greater attention and had more of an interest in what the organisations had to say.
- A main point of contact for the community was established, so that they could ask any questions that they had in relation to the property protection scheme.
- A flood fair (delivered by the partnership and the National Flood Forum) to showcase some of the property protection products and provide opportunities for members of the community to consider options with experts.

Outcomes

- Improved awareness of flood risk within the area and further developed the Flood Action Group
- The large range of engagement and communication methods used meant that all members of the community were able to engage in the project when it best suited them.
- The community had more effective property protection and better operational response at times of flooding.

Lessons learnt

- A community plan is recommended to ensure all products are installed correctly in good time. The plan can build in extra help locally to help those more vulnerable people in the community install their products.
- Providing the local community with information about the flooding sources that may affect them, and roles and responsibilities for flooding empowered the community to take greater responsibility for flood resilience.
- Having members of the local community on the project team allowed them to achieve a community-based scheme much more easily as they were able to participate, understand and respond to the needs of the community.



Figure 4.4 The household level protection scheme



Figure 4.5 A flood fair informing the local community

4.5.1 Simplify complex messages

Flood risk management messages need to be easy to understand. A complex idea clearly explained is much better than over simplifying the message and losing some of its content (Sorensen *et al*, 2006). A balance needs to be struck as complex concepts or solutions should not be over simplified where solutions or future risk from flooding are no longer understood. In addition to the use of images to explain complex ideas, develop icons and graphics in partnership with the community to help represent complex aspects of flooding. Icons and graphics can help communities to understand risk easier and quicker, and enable recognition of an established topic (see [Information](#)).

Information

The use of icons in communicating flood risk

The primary goal of using icons should be to help the user absorb and process information more efficiently. This is usually done by having a lot of white space and using icons that do not distract from the content but rather augment it. Using icons well enriches even minimal content by giving it more substance, enabling effective communication and engagement without wordiness. Icons should be used to draw attention to your content, not to diminish or replace it.

For further information go to: <http://tinyurl.com/atqbyl> (accessed 29/01/15)

Site visits, visualisations (particularly 3D animations) help communities understand complex situations and the implications of flooding. Face-to-face and individual talks are particularly important to explain complex ideas to community participants, and can usefully be undertaken in conjunction with site visits, where you can discuss these issues with people (Sorensen *et al*, 2006). Clear and simple messages on benefits and opportunities are vital (see [Case study 4.4](#)). By being clear on your message, you will be able to more easily establish common ground and shared outcomes with the local community and stakeholders.

As discussed in Part B of the framework ([Section 4.3](#)) tailoring the type of media and techniques used to communicate to different people, community groups and other stakeholders should ensure effective flood risk communication (Annis, 2011).

Case study 4.4
Lincolnshire prepares for coastal flooding

Background

The Lincolnshire coast is at risk from tidal flooding. This is most likely to happen particularly during the storm season (September to March). Although the coast is better protected plans were put in place to manage flooding, but a prompt community response is vital.

The challenge

It was vital that the community most likely to be affected by tidal flooding were aware of the potential risks, understood how they could prepare and receive flood warning advice. A large number of people, businesses and stakeholders needed to be engaged with.

Overcoming the challenge

The Environment Agency, Lincolnshire County Council and the coastal district councils embarked on a general awareness raising campaign based on strong branding. Posters, based on the seaside in the 1920s and 1930s have been used with a very simple message “We’re prepared for coastal flooding in Lincolnshire – are you?” and a call to action “Make a call, make a plan – sign up to Flood Warnings Direct and make a flood plan”.

The campaign was delivered through the media, leaflets delivered to homes and businesses in at-risk communities, posters, social media, council communication and engagement channels, GP surgeries and hospitals, and displays in bus shelters and on refuse lorries.

Outcomes

- The campaign was very successful in raising awareness, increasing uptake of Flood Warning Direct by 64 per cent as well as individuals completing flood plans.
- The campaign has been re-launched to further increase flood resilience along the coast.
- The initiative has also been recognised at the Good Communication Awards in 2011, where it was commended for delivering a measurable change in public perception and stands out as an example of good practice.

Lessons learnt

- The use of clear and concise messages on visually effective posters distributed widely across the County, initially engaged the community on the issue of flood risk and made them more receptive to further active engagement.



Figure 4.6 Lincolnshire's campaign posters incorporating a 1920s and 1930s design

4.5.2 Using empathy

Communication should explain the risk posed by a potential flood hazard, addressing the combination of both the chance of occurrence of a particular event with the impact that the event would cause (Sorensen *et al*, 2006). Undertake communication and engagement in an empathetic manner and use individuals who can relate to those involved or affected. **Case study 4.5** is an example of how adopting an empathetic approach to communication and engagement can generate buy-in to community flood planning.

Use community flood groups from surrounding areas that have experienced flooding and that understand the need for effective communication and engagement with the community, to help get the message across to other communities. Local communities at risk of flooding can be receptive to these community flood groups.

Case study 4.5
Effective communication and engagement to raise awareness of flood risk, Shropshire, UK

Background

Fifty-nine properties are at risk of flooding in the Wesley Brook area of Shropshire, some of which were flooded in 2007.

The challenge

There was a relatively low awareness of flood risk and low uptake of the Environment Agency's Floodline Warning Direct service. There was also misinformation within the community about the reasons for the 2007 flooding and it was thought by the Council that face-to-face discussion would help reduce this problem and build trust. It was also suggested that the residents would benefit from sharing experiences and by listening to approaches to manage flood risks.

Overcoming the challenge

Working on behalf of Shropshire Council, a consultant went in to the community to actively and personally engage with those deemed at risk. Door-to-door visits were undertaken to raise awareness and start sharing approaches to better manage flood risk. The consultant used their own experiences of flooding to discuss community members' concerns and develop a trusting relationship. The residents were encouraged to attend an exhibition event, part of which covered preparation for flooding. The consultant explained how a flood plan can be completed and this was supported by representatives of a nearby community talking about their experiences and benefits of writing a community flood plan.

Outcome

- ◆ The project has been recognised as a success with an increase in the uptake of community flood plans.
- ◆ There was also an increase in the number of people signing up to receive flood warnings, from five to 60 people.

Lessons learnt

- ◆ Although both the manner and type of engagement was time intensive, this and the ability to empathise with the concerns of the community were necessary for successful quality engagement.

4.5.3 Raising awareness and acceptance of risk

Some of the main challenges to the effectiveness and success of communication and engagement and the ability to generate community ownership of LFRM include an 'it won't happen to me' attitude or lack of awareness due to a lack of previous flooding.

There may also be apathy because of disbelief that engagement in the communication process will produce change.

There are a variety of local flood risks and each person's perception of the nature of flood risk will vary. Making the flood risk real to the community helps raise awareness. However this should be done without raising undue alarm. Flood forum meetings or flood action groups are a useful way of raising and maintaining awareness with those likely to be affected by flooding and those with the potential to manage it.

Some of the most important factors cited as motivating people to become involved in flood risk management in their community include (Aecom, 2011):

- ◆ being personally or financially affected by flooding
- ◆ disruptions to daily life
- ◆ evidence that those with power are taking the lead and actively seeking to manage flood risk
- ◆ informal meetings and social events
- ◆ compensation for attendance or involvement in communication and engagement process, eg free parking at events, goodwill gestures and incentives schemes for involvement.

4.6 Framework Part E: monitor and evaluate the communication and engagement plan

Information

Monitoring the communication and engagement plan

For communication and engagement to remain effective throughout the lifetime of the project, the communication and engagement plan should be monitored on a regular basis.

Providing people with feedback provides reassurance that the process has been worthwhile, that they should continue to participate and that their participation adds value to the management of local flood risk.

Feedback from the community on how well the communication and engagement plan is working or has worked is also beneficial to the project team.

Communication and engagement plans should be flexible and adapt to the characteristics of the project and the people (see Part C of the framework, [Section 4.4](#)). Occasionally, you might have to change the approach taken to ensure the aims and objectives of the communication and engagement plan are achieved. How you identify aims and objectives is explored in Part A of the framework ([Section 4.2](#)).

Monitoring and evaluating the effectiveness of the communication and engagement plan should not be undertaken as a one-off exercise, instead it should form part of a continual review process. If something is not working, or you receive feedback from members of the community to say they would rather be engaged in a different way, take action to address it and add it to a lessons learnt report – this also applies to projects with a short timetable.

As you progress with delivering your communication and engagement plan ask the following questions:

- ◆ What is, and what is not working well, and why?
- ◆ Has all the information and help needed been made available?
- ◆ Have all of the people been included in the communication and engagement plan (who were identified in Part B, [Section 4.3](#))? Is there proportionate representation?
- ◆ Have people engaged in the process? If not, and if necessary, how can it be rectified?
- ◆ Is the project on target to achieve the original aims, objectives and outcomes, and are they still valid?
- ◆ Has anything changed since the project started?
- ◆ Collecting feedback from participants on the approach and techniques used can help monitor and evaluate the success of the communication and engagement plan to date, allowing you to change the approach if necessary (Chess and Purcell, 1999).

4.6.1 Monitor

Monitoring the progress of your communication and engagement plan has a number of benefits, including:

- ◆ Improving the effectiveness of your communication and engagement plan – without a thoughtful monitoring and evaluation strategy, you have no way of knowing if your plan is working or whether you need to make adjustments. Understanding the effect of your communication and engagement plan and looking at areas of improvement will help you reach the desired outcomes.
- ◆ Providing the opportunity for changing your strategy and tactics – monitoring progress helps you collect valuable information at critical moments so that you can make tactical and strategic adjustments.
- ◆ More effectively engaging with stakeholders through understanding what techniques work best.

4.6.2 Evaluate

It is important to establish how the success of communication and engagement will be evaluated or measured. This guide does not aim to set out the exact definition of success, as this varies according to the flood risk issue, opportunity, situation, aims of the project and those involved. However, it does recognise that success could take the form of both tangible and intangible objectives. Look at the meaning of success from a number of perspectives because how you measure it may differ in relation to who is defining success. For example, RMAs may define success in relation to discharging their statutory responsibilities while others may define success as achieving the aspirations of the local community and interest groups.

Small tangible results help build community trust and alleviate perceived fear of change (Frew, 2009). Visible low-cost quick wins, such as clearing screens and gullies, removing rubbish from local watercourses and vegetation management, even if there is only a very small impact on flood risk, can have a positive effect on a community's perception of success and increase their likelihood of future involvement.

Information

Measuring success

People measure success in a number of forms. Chess and Purcell (1999) define it in three ways:

- 1 Outcome goals – when success is outcome-specific, successful participation is judged solely by the outcome.
- 2 Process goals – instead of defining public participation by the outcomes, it can be defined by the participatory process used.
- 3 The middle ground – public participation should meet some balance of outcome and process goals.

Questions that you could ask to help measure and evaluate the success of your communication and engagement plan are illustrated in **Figure 4.7**.

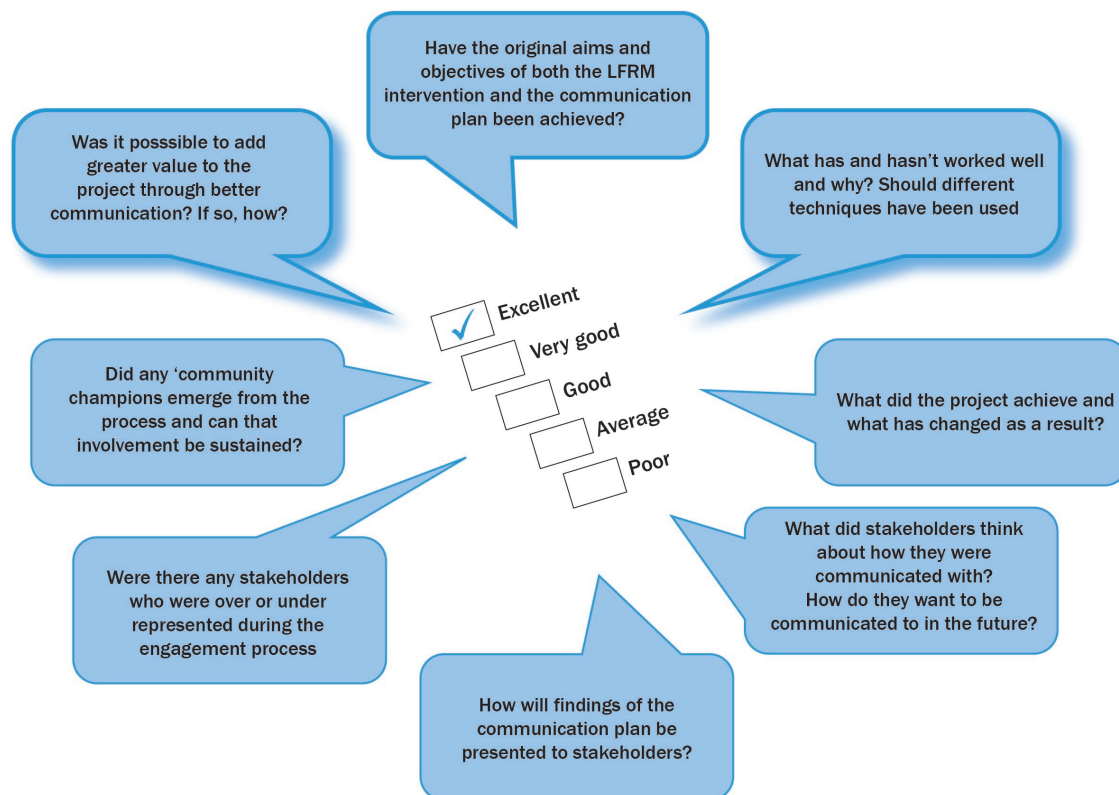


Figure 4.7 Evaluating your communication and engagement plan

There are a number of methods that can be used to evaluate the success of your communication and engagement plan. An example of common methods is set out in **Table 4.3**.

Table 4.3 Methods of evaluation

Method	Description
Interviews	Select a sample of participants engaged in the project, asking a mix of open and closed questions. If there's agreement one-to-one interviews can be recorded (using a Dictaphone or smartphone).
Focus groups	Bring together a small group of stakeholders to explore their experiences of the engagement process and their views on the effectiveness of the communication and engagement plan. Larger projects may require several focus groups. To encourage debate bring together stakeholders with different roles or responsibilities.
Surveys	Surveys (paper or online) can be used to gather feedback from participants. Think carefully about the questions you ask ensuring they do not lead the respondent. These could include open, closed and multiple choice questions. Surveys can be simple and inexpensive to administer (see Chapter 5, CIRIA C752).
Analytics	The effectiveness of online communication and engagement techniques, such as websites, social media and blogs can be measured quantitatively (eg Google Analytics). This allows you to track the number of unique visitors to a web page, or the number of views of a blog over a certain period of time.

In common with your approach to communication and engagement (eg a proportionate and pragmatic approach, see [Section 3.5](#)) the scale of your evaluation will vary depending on your circumstances. For example, if your plan was complex, you may wish to conduct formal surveys to solicit feedback. If your plan was not complicated, you may simply speak one-on-one with people who were involved.

Developing channels for communication and engagement for a specific local flood risk issue does not mean that communication and engagement should stop. Recognise how the momentum gained can be sustained and used for other flood risk management issues (see Asiney *et al*, 2008 and Petts and Leach, 2009).

4.6.3 Communicate the success of a project

It is important that you communicate the success of both the project itself (for example, planning permission given to a flood defence chosen by the local community) as well as to communicate the success of the project in terms of participation (for example, 400 people attended a flood fair over three days).

People who have engaged in the process of communication like to know how their input and time (often given on a voluntary basis) has influenced the objective of the project. Provide them with feedback to give reassurance that the process has been worthwhile, that they should continue to participate in future exercises, and that their participation adds value to the management of local flood risk.

It is also important that feedback is provided to the project team on how well the community think the communication and engagement plan has worked. Feedback is a two-way process – from the project team to the community and from the community to the project team.

In the long term, communicating the success of a project and the importance of communication and engagement can help create long-term partnerships, build capacity and create a sense of empowerment among communities.



Figure 4.8 Feedback forms – an effective technique for gathering community feedback

4.7 Practical examples

4.7.1 Application of the framework

Five practical examples have been developed to illustrate how the framework can be used, leading to the identification of different priorities, issues and opportunities.

When reading the framework, and in addition to the supporting case studies included in this guide, these practical examples can assist with understanding the different parts and aspects of the framework.

Table 4.4 Summary of examples of application of the framework

Example	Context
Raise awareness and increase engagement in LFRM	People are often unaware of the risk posed by groundwater or underground drainage systems and sewers. In such cases it can be necessary to raise awareness of local flood risk and increase engagement of stakeholders in LFRM.
Recovery after a flood event	Severe surface water flooding has occurred for the first time affecting a large number of residents' homes. The emergency stage of flood management has ended – longer term recovery and resilience to future flooding is needed.
Preparation of LFRMS (also relevant to SWMP)	Production of the LFRMS is one of the key requirements for LLFAs under the Flood and Water Management Act (FWMA) 2010. It outlines how local flood risk will be managed and will so be crucial for gaining community-wide support for the LLFA's activities. There should be consultation with the public and any RMA that would be affected.
When a LFRM project is planned	The need for a flood risk management capital scheme for a location may have been identified as part of development of your local strategy. Engagement and communication with the local community will have already taken place within this process to identify risks, needs and aspirations.
When a new development is planned that might influence the risk of flooding	Proposals for a major new development within the floodplain are to be submitted. There may be opportunities for developer contributions (eg through a community infrastructure levy) and the opportunity to improve their flood management measures to provide further protection for the existing community, as part of the LA's planning determination process.

Example 4.1 Raise awareness and increase engagement in LFRM

Context

People are often unaware of the risk posed by groundwater or underground drainage systems and sewers. In such cases it can be necessary to raise awareness of local flood risk and increase engagement of stakeholders in LFRM before a flood event occurs.

The framework

Part A Define opportunities and challenges

The aim of engagement is to raise awareness among residents, increase their involvement in LFRM and reduce the consequences of a future flood event by:

- ◆ identifying the existing level of awareness and improving people's understanding of the types of flooding and how they are caused
- ◆ strengthening residents' resilience measures both physical and behavioural
- ◆ establishing a long-term dialogue with the at-risk residents
- ◆ establishing that your aims can link in with other LFRM you are responsible for – to generate multiple benefits
- ◆ identifying active community members who could help raise awareness
- ◆ understanding the aims of residents to develop a shared approach

Part B Identify stakeholders

Participants might include:

- ◆ homes at high risk
- ◆ homes at lower risk
- ◆ vulnerable people and institutions
- ◆ small businesses
- ◆ landlords of at-risk properties
- ◆ flood action group(s).

These groups can be further broken down, ie elderly individuals, young single professionals. It is important to understand the groups most at risk and with the greatest need for increased awareness, to support prioritisation of your activities.

Part C Prepare the communication and engagement plan

Identify the communication and engagement techniques that are most likely to be effective. Base these on an understanding of the local context you are trying to raise awareness within. Techniques need to be engaging and informative. These could include:

- ◆ leaflet drops
- ◆ posters in popular locations accessed by residents
- ◆ meetings resident associations or local community groups

Ensure there is a long-term commitment with a consistent dialogue. Raising awareness is just the first step in the management of LFRM so consider how this can act as a stepping stone for future engagement and community ownership of LFRM

Part D Deliver the communication and engagement plan

- ◆ To raise awareness among some residents you may need to appropriately pitch the information being presented so that it is clearly understood
- ◆ Some residents may be resistant to being involved – you might need to be more dynamic and engaging with the approaches to convey the 'real' impacts of flooding
- ◆ Recruitment of the right local champions can help engagement and a point of trusted contact for the residents.

Part E Monitor and evaluate the communication and engagement plan

- ◆ Undertake a survey of people's awareness before and after you have engaged with them.
- ◆ Follow-up suggested or agreed next steps resulting from the awareness raising campaign.
- ◆ Make a note of what communication and engagement techniques had the greatest impact – in particular make a note of what worked best for certain groups. This information can be shared with others in your organisation.

Example 4.2 Recovery after a flood event

Context

Severe surface water flooding has occurred for the first time affecting a large number of residents' homes. The emergency stage of flood management has ended and longer term recovery and resilience to future flooding is needed.

The framework

Part A Define opportunities and challenges

Objectives for communication and engagement activities could relate to the need for:

- ◆ increasing community ownership of LFRM
- ◆ increasing the number of flood wardens
- ◆ increasing resilience to future events and reducing the impacts of flooding, for both residents and businesses.

Part B Identify stakeholders

Ideally relationships would already have been built with residents at risk of flooding before an incident happens. If not, relationships with the affected community may already exist for other activities undertaken by your organisation (or partners) and may be established.

Stakeholders could be broken down into a number of groups, including:

- ◆ residents whose properties were or were not flooded
- ◆ local businesses – may be part of a chain
- ◆ small businesses – sole traders, franchisees
- ◆ landlords of affected properties and/or registered social landlords (RSLs)
- ◆ faith and charitable groups who can provide support
- ◆ special situations, ie vulnerable people and institutions affected
- ◆ RMAs and/or statutory undertakers.

It is important to identify the groups most in need of support, to help prioritisation of your activities.

Part C Prepare the communication and engagement plan

- ◆ The communication and engagement plan and the techniques used will need to be tailored to the different groups affected.
- ◆ Depending on the context residents will require different levels of help during the same period following the event.
- ◆ The same residents may need varying levels of help over different periods during the recovery process.
- ◆ Stakeholders will want to see action being taken so that the impacts of flooding are reduced in the future. Make sure your approach involves stakeholders in the decision making process helping to create longer term ownership of LFRM.
- ◆ Beware of stereotypes. For example the young family new to the area with no house insurance and little family support may require greater help than the stereotypical elderly person but who has friends and family unaffected family close at hand.

Part D Deliver the communication and engagement plan

- ◆ You will need to show empathy to those affected – a wide skills set will be needed to face the variety of challenges.
- ◆ Listen to residents' solutions and visibly engage with them.
- ◆ Local champions and groups can help engagement and provide a point of trusted contact for the residents and/or affected community.
- ◆ Foster good relationships developed during this period.
- ◆ Some residents will remain uneasy about future flood events. Harness this in building their resilience.

Part E Monitor and evaluate the communication and engagement plan

- ◆ Both positive and negative feedback should be acknowledged and inform how the communication and engagement plan develops.
- ◆ Cultivate sources of feedback, such as via community champions
- ◆ Seek ongoing feedback, asking questions such as:
 - ◇ How can the next event be better managed?
 - ◇ What lessons can be identified and acted on now?
 - ◇ What needs to be done now to better prepare the community for next time?
 - ◇ What information needs to be refreshed and how regularly in order to maintain actionable plans?

Commission independent impartial social research to inform recovery planning.

Example 4.3 Preparation of LFRMS

Context

Production of the LFRMS is one of the key requirements for LLFAs under the FWMA 2010. It outlines how local flood risk will be managed and will therefore be crucial for gaining community wide support for the LLFA's activities. There should be consultation with the public and any RMA that would be affected. There will also be similar challenges and opportunities when developing SWMPs.

The framework

Part A Define opportunities and challenges

Aims and objectives for your communication and engagement activities in support of the LFRMS could include:

- ◆ making sure that communities are fully involved in all aspects of planning for and implementing local flood risk management
- ◆ ensuring important messages and information are developed and sent to the right people at the right time and in the right way
- ◆ creating opportunities for genuine two-way dialogue
- ◆ making sure communities have enough information to effectively increase their own resilience.

Part B Identify stakeholders

- ◆ Identify other RMAs.
- ◆ Gaining support of elected members and senior managers in all RMAs. This is vital to successful development of the LFRMS.
- ◆ Identify communities and community groups segmenting them by responsibilities and abilities (see [Section 3.2](#)). Diversity of the community will need to be identified.
- ◆ Identify local business and other commercial interests.
- ◆ Other stakeholders (eg Canal and River Trust, Network Rail, transport providers, utilities).
- ◆ To support the planning and prioritisation of your communication and engagement activities, it is important to understand the relative impact of flood risk on stakeholders..

Part C Prepare the communication and engagement plan

- ◆ Consider how other RMAs and partners can support development of the communication and engagement plan.
- ◆ Communications with the public will be strengthened if your engagement is integrated with this wider partnership approach – consider developing a joint strategy or approach for communicating and engaging with your partners.
- ◆ Identify how the communication and engagement plan can align with other local priorities.

Part D Deliver the communication and engagement plan

- ◆ Prioritise the use of existing communication activities being delivered by partners, and explore opportunities for joint working.
- ◆ Consider the potential for social media and online communities as a way to engage with some harder to reach audiences (eg young adults).
- ◆ The involvement of elected members and senior managers will help to create a proactive stance rather than reacting to flood risk problems when they happen.

Part E Monitor and evaluate the communication and engagement plan

- ◆ Throughout your work on the LFRMS, actively seek and be aware of feedback (both positive and negative) to inform how you are communicating and engaging.
- ◆ Be flexible if you think you are not getting your message across, or if you think you are not hearing what your community and stakeholders think.
- ◆ In retrospect what lessons can be identified and acted on now?
- ◆ What needs to be done to better engage the community and interest groups for next time?
- ◆ Think about how engagement carried out for the LFRMS can inform and link to the requirements for ongoing awareness raising, scheme development and flooding event related communications.

Example 4.4 When a LFRM project is planned

Context

The need for a flood risk management project may have been identified as part of development of your local strategy. This could require the need for large-scale planning application.

The framework

Part A Define opportunities and challenges

It is better to say “we need to understand what flood risks affect the community, and work with the community to find options for managing their risks” rather than “we need to build a flood defence”. The aim and objectives of what needs to be achieved should be defined at this point. Some suggestions for communication and engagement aims and objectives could include:

- ◆ making sure that communities are fully involved in all aspects of planning for and implementing local flood risk management
- ◆ ensuring all the important messages and information are identified, developed and sent to the right people at the right time and in the right way
- ◆ create meaningful opportunities for real two-way dialogue
- ◆ make sure communities have good quality information and support designed to help them effectively increase their own resilience.

Part B Identify stakeholders

- ◆ Identify communities and community groups segmenting them by responsibilities and abilities.
- ◆ Are there any active community members or champions who could be involved?
- ◆ Identify colleagues in other LA departments who may be active in this area, to coordinate activities and identify synergies.
- ◆ Identify other relevant RMAs.
- ◆ Gain support of elected members and senior managers in RMAs.
- ◆ Identify business and other commercial interests.
- ◆ Other stakeholders (eg Canal and River Trust, Network Rail, transport providers, utilities).
- ◆ It is important to understand the relative impact of existing flood risk on stakeholders, as well as on the project itself, to support the planning and prioritisation of your communication and engagement activities.

Part C Prepare the communication and engagement plan

- ◆ Align the communication and engagement plan with the activities of the planning team responsible for preparing the planning application – they will have to consult statutory consultees within this process.
- ◆ Identify who in your organisation is already in contact with the community.
- ◆ Talk to people either through your existing contacts or independent organisations such as the National Flood Forum.
- ◆ Make sure you have your partners involved and informed at all stages – they can act as ‘communicators’ (see [Section 3.3](#)).
- ◆ Residents will have their own ideas for solutions that need to be heard and understood.

Part D Deliver the communication and engagement plan

- ◆ Prioritise the use of existing communication and engagement activities being delivered by partners, and explore opportunities for joint working.
- ◆ The involvement of elected members and senior managers will help.
- ◆ Understand community aspirations and motivations:
 - ◇ How do they view the council and its partners on this issue?
 - ◇ What was their experience in the past?
 - ◇ Are they engaged already through an action group or individually?
 - ◇ Are they already in touch with the LA about other issues?

Part E Monitor and evaluate the communication and engagement plan

- ◆ Are there potential barriers to obtaining planning permission that could be overcome via an alternative approach to communication and engagement – this could provide a better understanding of local concerns
- ◆ How can engagement carried out for the scheme inform and link to your requirements for ongoing awareness raising and flooding event related communications?
- ◆ How could you work better with the wider project team responsible for delivering the project, such as engineers, planners, ecologists?

Example 4.5 When a new development is planned that might influence the risk of flooding

Context

Proposals for a major new development within the floodplain is going to be submitted. There may be opportunities for developer contributions (eg through a Community Infrastructure Levy) and the opportunity to improve their flood management measures to provide further protection for the existing community, as part of the LA's planning determination process.

The framework

Part A Define opportunities and challenges

Ensure you understand the developer's proposals fully:

- What are the flood risks for the location? Are they significant, and are they understood? How has this been communicated?
- What are the community's needs and aspirations and can they be addressed through mitigation or enhancement measures, or via developer contributions?

Part B Identify stakeholders

- Work with your planning colleagues (case officer) who will be managing the application.
- Engage with the developer.
- Encourage communities and community groups to engage in the design process.
- Share your views with the Environment Agency.
- Understand views of elected members.
- Identify local business and other commercial interests.

It is important to understand the relative impact of development-associated flood risk on stakeholders to support the planning and prioritisation of your communication and engagement activities.

Part C Prepare the communication and engagement plan

- You may need strong negotiation skills to influence the final design of the development.
- Identify who is responsible for decision making (eg the case officer) so you can target your feedback to the right person.

Part D Deliver the communication and engagement plan

- Engage early in the pre-application process to maximise your influence.

Part E Monitor and evaluate the communication and engagement plan

- Did you engage early enough in the design process to influence the development?
- Did you have the right skills to influence the design process?
- Were you successful in representing the views of the local community?
- Did you maximise the benefits of the development to the local community?

Key messages...

- Use the framework to guide you through the process of communication and engagement. Refer to the framework as and when necessary.
- Define the opportunities and challenges and understand how communication and engagement activities can respond to these.
- Identify participants at the start, but be prepared to engage with others as the project progresses.
- Prepare an inclusive and flexible communication plan that can respond to changes in the wider project.
- Monitor and evaluate progress as you go.
- Communicate the result of the project and the communication and engagement process to those involved.

5 Techniques

This section

- ◆ Provides the criteria for choosing the right communication and engagement techniques.

For a more a detailed review of communication and engagement techniques, building on the summary of techniques provided in [Section 5.2](#), see CIRIA C752.

5.1 Choosing the right techniques

[Section 3.5](#) of this guide advocates a proportionate and pragmatic approach to communication and engagement. Techniques used should be appropriate to the scale and nature of the LFRM intervention and local needs. Part C of the framework (see [Section 4.4](#)) describes how and why a communication and engagement plan should be produced. It sets out your methods and approach alongside the skills needed to implement the communication and engagement plan. It should also include a consideration and summary of the techniques to be used. This section of the guide is intended to support you in doing this.


There are many different techniques that can be used. It is important to choose a selection of techniques that fit the circumstances of your project and the purpose of your communication and engagement programme. Resource considerations, your target audience, the type of issue and the stage the project is at in the flood risk management cycle, could and should affect the type of communication and engagement techniques used. For example, the need to raise awareness, developing options, construction of a physical flood defence, the need to gain acceptance and support.

When deciding which techniques are most appropriate it is helpful to ask the following questions:

- ◆ Have you defined the people you want to reach?
- ◆ Have they been broken down into clear segments or groups to target?
- ◆ Is there a common or shared understanding of the flooding problem between partners, other stakeholders and the local community or communities?
- ◆ Has the audience previously been affected by flooding? If so, what techniques have already been used? How well did they work?
- ◆ How receptive will your audience(s) be? If they are hard to reach or unwilling to engage you may need a multi-pronged approach using a wide variety of techniques.
- ◆ What messages need to be communicated? Is this awareness raising, extensive engagement, or both?
- ◆ How can the messages be communicated in the right language? Do you need to simplify language or use visual aids and icons for example?
- ◆ What levels and types of communication and engagement are needed for each of the stages of scheme development?
- ◆ What resources do you have to carry out the process?

5.2 Communication and engagement techniques in LFRM

Figure 5.1 describes each of the five degrees of engagement. Table 5.1 summarises the range of communication and engagement techniques that can be used and indicates the degree of engagement offered by each. CIRIA C752 provides further detail on using the techniques listed, including key considerations and tips on use.



Inform	Informing stakeholders and letting them know what is going on.
Consult	Gathering information to inform LFRM interventions. Offering a number of options and listening to the feedback received.
Involve	Involving stakeholders to provide an opportunity for discussing and sharing ideas.
Collaborate	A partnership approach, sharing decision making and responsibility with others.
Empower	A community led approach, where the community will also need to deliver.

Figure 5.1 Degrees of communication and engagement

For each technique (in Table 5.1) an indication of the effort required for delivering and managing the process is shown from 1 to 3 with '1' being the least and '3' being the greatest amount of time and resource required. The effort required will vary depending on the specific approach and a more detailed assessment should be made when developing the communication and engagement plan.

1

2

3

4

5

Table 5.1 Examples of resource levels for communication and engagement techniques

Technique	Engagement					Effort required	Approach
	Inform	Consult	Involve	Collaborate	Empower		
Information and publicity materials	✓					2-3	Techniques present and broadcast information, primarily used to inform and potentially consult stakeholders.
Local media (printed and broadcast)	✓	✓				1-2	
Using a website	✓	✓	✓	✓	✓	2-3	Techniques to develop a virtual conversation with stakeholders, or present complex information used to inform, consult and potentially involve. Often not used in isolation, but supporting other techniques.
Social and electronic media	✓	✓	✓			1-3	
GIS maps and paper maps	✓	✓	✓	✓	✓	2-3	
Visualisation tools	✓	✓	✓	✓	✓	3	
Door knocking	✓	✓	✓			2-3	
Telephone contact	✓	✓	✓			3	Techniques use personal or face-to-face contact with a wide range of stakeholders to inform, consult and involve. Opportunities for collaborative working as appropriate.
Surveys	✓	✓	✓	✓	✓	2-3	
Public meetings	✓	✓	✓			3	
Public exhibitions	✓	✓	✓	✓	✓	3	
Flood Fairs	✓	✓	✓	✓	✓	3	
Communication through education	✓	✓	✓	✓	✓	2-3	Techniques use a range of existing frameworks and established relationships. Can help empower stakeholders and identify those who can deliver actions.
Communication with and through existing groups	✓	✓	✓	✓	✓	1-3	
Site visits and activities	✓	✓	✓	✓	✓	2-3	Techniques to work in depth with small groups of stakeholders (selected or self-selected) to develop the higher levels of engagement.
Engaging local councillors	✓	✓	✓	✓	✓	2-3	
Deliberative, interactive workshops	✓	✓	✓	✓	✓	2-3	
Community flood planning	✓	✓	✓	✓	✓	3	
Innovative methods	?	?	?	?	?	Variable	Techniques help improve communication and engagement; particularly where there is lack of interest, or specific groups need to be targeted.

5.3 Putting the process into practice

Case study 5.1, is a good and practical example of how a range of techniques can be employed to deliver effective communication and engagement in the management of local flood risk, while also generating multiple benefits.

Case study 5.1
Greening streets in Norwood, London

Background

Lambeth Council worked with sustrans (a sustainable transport charity) to improve surface water management, street safety and design through delivering green infrastructure (green streets) in and around a road junction in south London.

The challenge

Flooding was reported in the area. Modelling and further investigation suggested that sustainable drainage could help manage local flooding by reducing surface water runoff entering into the sewer system.

The project also offered opportunities to tackle other local issues, including pedestrian and road safety and the general appearance of the area.

Potential opportunities to overcome these challenges include 'green streets' through the delivery of sustainable drainage that include built-out vegetated areas, rain gardens and permeable surfaces.

It is important that there is community support for these approaches, which may change road layout and availability of parking. Initially, there was some resistance around the potential loss of car parking this was overcome through engagement and changes in the proposed design.



Figure 5.2 Workshop on scaled models

Overcoming the challenge

A variety of engagement activities were used on this project:

- The sustrans project officer and LA officer had a visible presence within the community, posting flyers, holding meetings, and using email, and a project blog.
- Involvement and feedback from the local community was obtained through informal drop-in sessions, providing opportunities to understand concerns and collaboratively design the green streets (using scale models of the roads).
- Community involvement and feedback has been further supported by a number of opportunities to directly vote on design suggestions, the outcomes of which were fed into the design process.
- One of the engagement activities near to the end of the design process included a community event where, with the use of hay bales, cones, chalk, maps and dialogue between the design team and community, proposed changes to the streets were communicated and demonstrated.

Outcomes

- Construction of the green street project will be finalised by the middle of 2015. The variety of techniques used to obtain input and participation from the community has meant that a shared understanding and support for the design and outcomes. Those most directly affected by change have demonstrably been directly involved in decisions.
- The communication and engagement process also helped improve understanding of local flood risk, with residents providing anecdotes of local flooding.

Lessons learnt

- Using a variety of engagement techniques over a defined timescale allowed active involvement of residents. However, this approach is resource intensive.
- Delivery of multiple benefits (improved surface water management, green infrastructure and road safety) helps develop community support and ownership. It also improves any cost-benefit ratio.
- Car parking and the impact of the design on availability is an emotive subject, direct input from residents meant that changes to designs were made. It was useful to have other design options considered to facilitate compromise.



Figure 5.3 Early workshop with engagement on the street



Figure 5.4 Community event with hay/straw bales



Figure 5.5 Public exhibitions – techniques for gathering feedback using vote tokens

Key messages...

- ◆ There are many different communication techniques that can be used. It is important that more than one method is considered and adopted throughout the lifetime of a project.
- ◆ No one approach fits all. It will be important to choose a selection of techniques that fit the circumstances of your project and purpose of your communication.
- ◆ Match techniques to the purpose and context. This requires clarity about the objectives of the communication process, for example is it to raise awareness, seek more detailed feedback on a proposed scheme, or both?
- ◆ Consider your target audience and the different segments within it and tailor your approach to match the challenges. For example are there pockets of vulnerable or deprived communities, an ageing community, language or other cultural barriers, and to what degree do decision makers need to be upskilled?

Glossary

Community Flood Group (CFAG)	Local community groups that aim to ensure all Risk Management Action Authorities (RMA) work closely together to manage flood risk and deliver an action plan to minimise flood risk within their local area. See <i>Risk management authority</i> .
Community	Anyone who is affected by flooding activities.
Communication	This term is used to cover a number of different information types and methods of transmitting that information. Methods range from straightforward information giving to the most engaging and participatory methods of communication with information being sent from and received by a project team empowering stakeholders and communities to take action.
Department for Environment, Food and Rural Affairs (Defra)	The UK Government department responsible for policy and regulations on environmental, food and rural issues.
Engagement	The degree to which people are actively involved in the management of local flood risk. This will vary based on the type of communication used. In this guide, the term ‘communication and engagement’ is used to refer to the whole spectrum of interaction.
Environment Agency (EA)	An executive non-departmental public body, sponsored by Defra. Within England it is responsible for regulating major industry and waste; treatment of contaminated land, water quality and resources, fisheries, inland river, estuary and harbour navigations and conservation and ecology. The Environment Agency is also responsible for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea. For more information about who is responsible for managing flood risks see Environment Agency (2013).
The ‘framework’	A structure for building a communication and engagement strategy proportionate to the scale and nature of the flood risk management intervention and the characteristics of the people involved in the process. The framework set out in this guide combines similar and proven approaches to managing flood risk.
Local flood risk management (LFRM)	Involves analysis, assessment and consequent action to reduce flood risk from local sources of flooding.
Local Flood Risk Management Strategy (LFRMS)	Outlines the LLFA’s approach to LFRM as well as recording how this approach has been developed and agreed. Production of the local strategy is one of the key requirements for LLFAs in England and Wales under the Flood and Water Management (FWM) Act 2010.
Lead local flood authority (LLFA)	<p>“Lead local flood authority’ in relation to an area in England means:</p> <ul style="list-style-type: none"> (a) the unitary authority for the area, or (b) if there is no unitary authority, the county council for the area. <p>‘Lead local flood authority’ in relation to an area in Wales means:</p> <ul style="list-style-type: none"> (a) the county council for the area; (b) the county borough council for the area. <p>LLFAs are required to:</p> <ul style="list-style-type: none"> • prepare and maintain a strategy for LFRM in their areas, coordinating

views and activity with other local bodies and communities through public consultation and scrutiny, and delivery planning.

- maintain a register of assets – these are physical features that have a significant effect on flooding in their area
- investigate significant local flooding incidents and publish the results of such investigations
- issue consents for altering, removing or replacing certain structures or features on ordinary watercourses
- play a lead role in emergency planning and recovery after a flood event.”

(Local Government Association, 2012)

Natural Resources Wales (NRW)	NRW took over the functions of the Environment Agency Wales, and is responsible for protecting and improving the environment of Wales and also has responsibility for protecting communities from the risk of flooding and managing water resources.
Office for Public Works (OPW)	The Irish Government’s lead flooding agency, responsible for delivering an integrated multifaceted programme aimed at mitigating future flood risk and impact.
Public participation	Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision making process. Public participation is the process by which an organisation consults with interested or affected individuals, organisations, and government entities before making a decision. Public participation is two-way communication and collaborative problem solving with the goal of achieving better and more acceptable decisions.
Regional Flood and Coastal Committee (RFCC)	In England and Wales, the RFCC is a committee established by the Environment Agency under the FWMA 2010, which brings together members appointed by lead local flood authorities (LLFAs) and independent members with relevant experience for three purposes: <ul style="list-style-type: none"> • to ensure there are coherent plans for identifying, communicating and managing flood and coastal erosion risks across catchments and shorelines • to promote efficient, targeted and risk-based investment in flood and coastal erosion risk management that optimises value for money and benefits for local communities • to provide a link between the risk management authorities, and other relevant bodies to engender mutual understanding of flood and coastal erosion risks in its area.
Risk management authority (RMA)	In England and Wales, a RMA means the Environment Agency (England), NRW (Wales), a lead local flood authority, a district council for an area for which there is no unitary authority, an internal drainage board, a water company, and a highway authority. In Ireland, it means the Office for Public Works and Irish Water.
Stakeholder	Stakeholders are those with an interest in any aspect of LFRM and can include unaffected, potentially affected or affected individuals or groups. For example this can involve local residents, community groups, regulators, or lead local flood authorities.
Surface Water Management Plan (SWMP)	A plan produce to address surface water management issues in a defined area. Such a plan will often involve a number of stakeholders including the risk management authorities, and may be produced to address existing flooding legacy issues or to support the sound implementation of new development.
Sustainable drainage system (SuDS)	A sequence of management practices and control structures designed to manage surface water in a more sustainable fashion than some conventional techniques.

Abbreviations

CFAG	Community Flood Action Group
Defra	Department for Environment, Food and Rural Affairs
EA	Environment Agency
FRM	Flood risk management
FWD	Floodline Warnings Direct
FWMA	Flood and Water Management Act 2010
IAPP	International Association of Public Participation
IDB	Internal Drainage Boards
LA	Local authority
LFRM	Local Flood Risk Management
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
NALC	National Association of Local Councils
NRW	Natural Resources Wales
OPW	Office for Public Works
RFCC	Regional Flood and Coastal Committee
RMA	Risk Management Authority
RNIB	Royal National Institute of Blind People
SWMP	Surface Water Management Plan
SuDS	Sustainable Drainage System

References

- AECOM (2011) *Social research and evaluation*, Flood Risk Management Community Engagement Evaluation Welsh Government, Cardiff, Wales, UK (ISBN: 978-0-75046-794-0)
- ANNIS, M (2011) *Community resilience: working together to prepare, respond and recover*, British Red Cross, UK
- ASINEY, E, PARRAS, T and VAN FLEET, J (2008) *Are we there yet? A communications evaluation guide*, The Communications Network, Naperville, Illinois, USA. Go to <http://tinyurl.com/phxh5mx> (accessed 29/01/2015)
- CHESS, C and PURCELL, K (1999) "Public participation and the environment: do we know what works?" *Environmental Science and Technology*, vol 33, 16, ACS Publications, American Chemical Society, Washington DC, USA, pp 2685–2692
- DAHLENBURG, J and MORISON, P (2009a) "Community engagement in environmental values water quality objective settings. WSUD planning at the catchment and local scales". In: *Proc 6th int WSUD conf and hydroplis #3*, 5–8 May 2009, Perth, Western Australia
- DAHLENBURG, J and MORISON, P (2009b) "Tapping into our biggest resource: engaging with the community in water quality objective setting and WSUD planning". In: *Proc 6th int WSUD conf and hydroplis #3*, 5–8 May 2009, Perth, Western Australia
- DERRICK, K. (2009) *Engagement, participation and partnerships*, Bristol City Council, Bristol, UK. Go to: www.ciria.com/landform/pdf/e9510_kathy_derrick.pdf (accessed 29/01/2015)
- ENVIRONMENT AGENCY (2013) *Working with others, a guide for staff*, Environment Agency, Bristol (internal document)
- ENVIRONMENT AGENCY (2014) *Managing flood risks: who is responsible*, Environment Agency, UK. Go to: <http://tinyurl.com/ne5jkpz> (accessed 29/01/2015)
- FERNÁNDEZ-BILBAO, A and TWIGGER-ROSS, C (2009) *More targeted flood warnings: A review, improving institutional and social responses to flooding*, Science Report SC060019 – Work Package 1b, Environment Agency, Bristol, UK (ISBN: 978-1-84911-064-8). Go to: <http://tinyurl.com/nebksfn> (accessed 29/01/2015)
- FREW, P (2009) "Coastal risk management – a local authority approach". In: *Proc Power to the people: leadership, partnerships and participation in local flood risk management*, Landform workshop E9510, 30 July 2009, CIRIA, London. Go to: www.ciria.com/landform/pdf/e9510_report.pdf (accessed 29/01/2015)
- HARMONICOP (2005) *Learning together to manage together, improving participation in water management*, Harmonising Collaborative Planning, University of Osnabrück, Germany (ISBN: 3-00016-970-9). Go to: www.harmonicop.uni-osnabrueck.de/HarmoniCOPHandbook.pdf (accessed 29/01/2015)
- LOCAL GOVERNMENT ASSOCIATION (2012) *Managing flood risk: roles and responsibilities*, London, UK. Go to: <http://tinyurl.com/opmh4vb> (accessed 29/01/2015)
- PETTS, J and LEACH, B (2000) *Evaluating methods for public participation: literature review*, R&D Technical Report E135, Environment Agency, Bristol, UK. Go to: <http://tinyurl.com/nuejbod> (accessed 29/01/2015)
- SORENSEN, A, TAPSELL, S and TUNSTALL, S (2006) *An evaluation of stakeholder communication and participation in the Floodscape pilot action projects*, Flood Hazard Research Centre, Middlesex University, London
- TAPSELL, S, TUNSTALL, S, SORENSEN, A (2006) *UK case studies in public participation: draft report to the Environment Agency*, Flood Hazard Research Centre, Environment Agency, Bristol
- WILCOX, D (1994) *Guide to effective participation*, Joseph Rowntree Foundation, York (ISBN: 1-87029-800-4)

Statutes

Flood and Water Management Act (FWMA) 2010 (c.29)

Further reading

- BALDWIN, C and TWYFORD, V (2007) “Enhancing public participation on dams and development: a case for evaluation based on multiple case studies” *International Journal of Public Deliberation*, vol 1, 2, International association for public Participation, Louisville, CO, USA
- BERGHOUSE, C, MACKENZIE, M DITCHFIELD, P (2008) *Developing a multi-agency flood plan (MAFP). Guidance for local resilience forums and emergency planners, version 4.4*, Department for the Environment and Rural Affairs and Environment Agency, UK. Go to: <http://tinyurl.com/kfzcoyc> (accessed 29/01/2015)
- BLACKSTOCK, K L (2006) “Developing and applying a framework to evaluate participatory research for sustainability” *Ecological Economics*, vol 60, 4, Elsevier Science BV, UK, pp 726–742
- BUTLER, D, MEMON, FA, MAKROPOULOS, C, SOUTHALL, A and CLARKE, L (2010) *WaND Guidance on water cycle management for new developments*, C690, CIRIA, London (ISBN: 978-0-86017-690-9). Go to: www.ciria.org
- CABINET OFFICE (2006) *Emergency preparedness*, HMSO, London. Go to: <http://tinyurl.com/obmlzlv> (accessed 29/01/2015)
- CABINET OFFICE (2014) *Improving the UK’s ability to absorb, respond to and recover from emergencies*, HMSO, London. Go to: <http://tinyurl.com/ax2d82o> (accessed 29/01/2015)
- CLG (2009) *Planning together. Updated practical guide for local strategic partnerships and planners*, Communities and Local Government, London (ISBN: 978-1-40981-177-0). Go to: <http://tinyurl.com/lbno6qn> (accessed 29/01/2015)
- DEFRA (2012) *Flood rescue national enhancement project. Flood rescue concept of operations, revised*, Department for the Environment, Food and Rural Affairs, London. Go to: www.defra.gov.uk/publications/files/pb13676-frcopdf (accessed 29/01/2015)
- DEFRA (2014) *The National Flood Emergency Framework for England*, Department for the Environment, Food and Rural Affairs, London. Go to: <http://tinyurl.com/oo3crhr> (accessed 29/01/2015)
- DEFRA (2014) *Flood emergency preparedness*, Department for the Environment, Food and Rural Affairs, London. Go to: <http://tinyurl.com/kp9pwqt> (accessed 29/01/2015)
- EIPP (2009) *Public participation in Europe: an international perspective*, European Institute for Public Participation, Austrian Ministry of the Environment, Austria. Go to: <http://tinyurl.com/mk3qfvh> (accessed 29/01/2015)
- ENVIRONMENT AGENCY (2006) *Water for life and livelihoods. A framework for river basin planning in England and Wales – summary*, Environment Agency, Bristol, UK. Go to: <http://tinyurl.com/p4k4vrn> (accessed 29/01/2015)
- ENVIRONMENT AGENCY (2012) *Flooding – minimising the risk. Flood plan guidance for communities and groups. Practical advice to help you create a flood plan*, Environment Agency, Bristol. Go to: <http://tinyurl.com/o5gx96a> (accessed 29/01/2015)
- ENVIRONMENT AGENCY (2014) *Flooding and extreme weather*, Environment Agency, Bristol. Go to: <http://tinyurl.com/adrevd> (accessed 29/01/2015)
- FAULKNER, H, MCCARTHY, S and TUNSTALL, S (2010) “Flood risk communication”. In: G Pender and H Faulkner (eds) *Flood risk science and management*, Chapter 19, Wiley-Blackwell, Oxford, UK (ISBN: 978-1-44432-484-6)
- GREEN, C and PENNING-ROUSELL, E C (2010) “Stakeholder engagement in flood risk management”. In: G Pender and H Faulkner (eds) *Flood risk science and management*, Chapter 18, Wiley-Blackwell, Oxford, UK (ISBN: 978-1-44432-484-6)

- HALCROW GROUP LTD and CIRIA (2012) *Partnership funding and collaborative delivery of local flood risk management: practical resource for LLFAs*, FD2643, report prepared on behalf of Department for the Environment Food and Rural Affairs, London, UK. Go to: <http://tinyurl.com/ll5yrda> (accessed 29/01/2015)
- HÖPPNER, C, BUCHECKER, M and BRÜNDL, M (2010) *Risk communication and natural hazards*, WP5 Report, Birmensdorf, Switzerland. Go to: <http://tinyurl.com/ngmnrz5> (accessed 29/01/2015)
- KOMAC, B, CIGLIČ, R, ERHARTIČ, B, GAŠPERIČ, P, KOZINA, J, OROŽEN ADAMIČ, M, PAVŠEK, M, PIPAN, P, VOLK, M, ZORN, M (2010) *Risk education and natural hazards*, WP6 Report, Birmensdorf, Switzerland. Go to: <http://tinyurl.com/o5geskr> (accessed 29/01/2015)
- LANE, S N, ODoni, C, LANDSTROM, C, WHATMORE, S J, WARD, N and BRADLEY, S (2010) “Doing flood risk science differently: an experiment in radical scientific method” *Transactions of the Institute of British Geographers*, vol 36, 1, Royal Geographical Society, London, pp 15–36
- LGA (2013) *Emergency planning*, Local Government Association, London, UK.
Go to: www.local.gov.uk/flood-emergency-planning (accessed 29/01/2015)
- MARTINI, F and ROO, A D (eds) (2007) *Good practice for delivering flood-related information to the general public*, EUR 22760 EN, European Commission, Directorate-General Joint Research Centre, Office for Official Publications of the European Communities, Luxembourg. Go to: <http://tinyurl.com/pfecsau>
- MDA COMMUNITY FLOOD CONSULTANTS (2012) *A 4-step guide to preparing a household emergency plan*, MD Associates, Worcester, UK. Go to: <http://tinyurl.com/pyhux7m>
- MERRETT, S (2012) *Evaluation of the Defra Property-Level flood protection scheme: 25918*, JBA Consulting, South Wales, UK. Go to: <http://tinyurl.com/p8gj33s> (accessed 29/01/2015)
- OFFICE OF PUBLIC WORKS (Ireland) *Flood risk management*, The Office of Public Works, Co. Meath Ireland. Go to: www.opw.ie/floodriskmanagement and www.flooding.ie/en/ (accessed 29/01/2015)
- REED, M S (2008) “Stakeholder participation for environmental management: a literature review” *Biological Conservation*, vol 141, 10, Elsevier BV, UK, pp 2417–2431
- REED, M S, GRAVES, A, DANDY, N, POSTHUMUS, H, HUBACEK, K, MORRIS, J, PRELL, C, QUINN, C H and STRINGER, L C (2009) “Who’s in and why? A typology of stakeholder analysis methods for natural resource management” *Journal of Environmental Management*, vol 90, 5, Elsevier BV, UK, pp 1933–1949
- RELU (2014) *Relu engagement with stakeholders*, Rural Economy and Land Use Programme, University of Newcastle, UK. Go to: www.relu.ac.uk/about/Stakeholders.htm (accessed 29/01/2015)
- RIVERS AGENCY (2013) *Rivers and flooding*, Northern Ireland, Department of Agriculture and Rural Development, Belfast, Northern Ireland. Go to: www.dardni.gov.uk/index/rivers.htm (accessed 12 January 2015)
- RBKC (2014a) *Flood risk management in the Royal Borough*, Royal Borough of Kensington and Chelsea, London. Go to: <http://tinyurl.com/q4znywu> (accessed 29/01/2015)
- RBKC (2014b) *Our duties as a lead local flood authority*, Royal Borough of Kensington and Chelsea, London. Go to: <http://tinyurl.com/kw9mpfb> (accessed 29/01/2015)
- SCHOFIELD, D (2012) *Community outreach for surface water management, community engagement – a case study from Portland, Oregon, USA*, Hydro Consultancy, UK. Go to: <http://tinyurl.com/npjnjyo> (accessed 29/01/2015)
- SELLERS, D (2009) “Inland flood risk management: local authority approach (Leeds)”. In: *Proc Power to the people: leadership, partnerships and participation in local flood risk management*, Landform workshop E9510, 30 July 2009, CIRIA, London. Go to: www.ciria.com/landform/pdf/e9510_report.pdf (accessed 29/01/2015)
- SEPA (2014) *Flooding*, Scottish Environment Protection Agency, Edinburgh, Scotland.
Go to: www.sepa.org.uk/flooding.aspx (accessed 29/01/2015)

SPELLER, G (2005) *Improving community and citizen engagement in flood risk management decision making, delivery and flood response*, R&D Technical Report SC040033/SR3, Environment Agency, Bristol, UK (ISBN: 1-84432-515-6). Go to: <http://tinyurl.com/kq5hyt4> (accessed 29/01/2015)

TAPSELL, S, TUNSTALL, S, GREEN, C, FERNANDEZ, A and PENNING-ROUSELL, E (2004) *Communication audit. Report to the Floodscape project*, Flood Hazard Research Centre, University of Middlesex, Enfield, UK

TIMMERMAN, J G, PAHL-WOSTL, C and MOLTGEN, J (2008) *The adaptiveness of IWRM: Analysing European IWRM research*, IWA Publishing, International Water Association, London, UK (ISBN: 978-1-84339-172-2)

TODOROVICI, Z, JONES, S W and ROBERTS, C (2008) "Role of local stakeholder networks in removing barriers to wider SuDS use". In: *Proc 11th int conf on urban drainage*, 31 August to 5 September 2008, Edinburgh, Scotland, pp 1-10

WATER BRIEFING (2012) "Environment Agency should be 'less controlling' in flood defence, says MP", *WaterBriefing*, April 2012, UK. Go to: <http://tinyurl.com/cffamm6> (accessed 29/01/2015)

WELSH GOVERNMENT (2011) *Flood risk management. Community engagement toolkit*, Welsh Government, Cardiff, Wales (ISBN: 978-0-75046-794-0). Go to: <http://tinyurl.com/p9oyrvh> (accessed 29/01/2015)

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Galliford Try plc	RWE Npower plc
Gatwick Airport Ltd	Sellafield Ltd
Geotechnical Consulting Group	Sir Robert McAlpine Ltd
Golder Associates (Europe) Ltd	SKM Enviros Consulting Ltd
Halcrow Group Limited	SLR Consulting Ltd
Health & Safety Executive	Temple Group Ltd
Heathrow Airport Holdings Ltd	Thames Water Utilities Ltd
High Speed Two (HS2)	Tube Lines
Highways Agency	United Utilities Plc
HR Wallingford Ltd	University College London
Imperial College London	University of Reading
Institution of Civil Engineers	University of Sheffield
Lafarge Tarmac	University of Southampton
Laing O'Rourke	WYG Group (Nottingham Office)
London Underground Ltd	
Loughborough University	

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This guide provides practical help to lead local flood authorities (LLFAs), risk management authorities (RMAs), and other authorities with responsibilities, for managing local flood risk. It is relevant to practitioners in England, Wales, Scotland, Northern Ireland, and Ireland.

This guidance is here to help. It is not meant to be prescriptive nor definitive but it does draw together vast experience and ideas that have been tried and tested. It will also be useful in identifying, engaging and working with people likely to be affected by flooding or integral to its future management.

Regardless of whether you are new to LFRM and/or communication and engagement, this guide should support your role as an 'intelligent client' to co-ordinate communication and engagement in LFRM.

Users of this guide may include flood risk managers, drainage engineers, planners, and communication and engagement professionals from LLFAs, district authorities and other local authority (LA) organisations.



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