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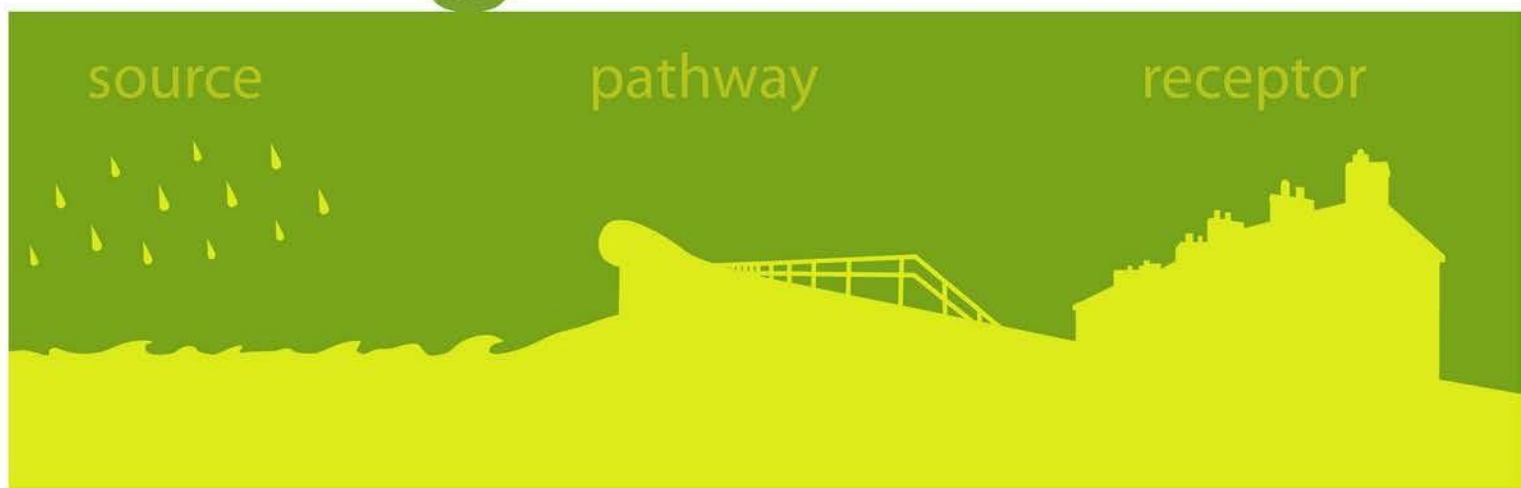


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## Public dialogues on flood risk communication

Evaluation report – SC120010/R2

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We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

This report is the result of research commissioned by the Environment Agency's Evidence Directorate and funded by the joint Flood and Coastal Erosion Risk Management Research and Development Programme.

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Email: [fcerm.evidence@environment-agency.gov.uk](mailto:fcerm.evidence@environment-agency.gov.uk)

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Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

**Author(s):**

Anna MacGillivray and Hilary Livesey

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**Research Contractor:**

Ursus Consulting Ltd, 57 Balfour Road, London, N5 2HD Tel. 07989 554 504

**Environment Agency's Project Manager:**

Jacqui Cotton, Evidence Directorate

**Project Number:**

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# Evidence at the Environment Agency

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The work of the Environment Agency's Evidence Directorate is a key ingredient in the partnership between research, guidance and operations that enables the Environment Agency to protect and restore our environment.

This report was produced by the Scientific and Evidence Services team within Evidence. The team focuses on four main areas of activity:

- **Setting the agenda**, by providing the evidence for decisions;
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- **Delivering information, advice, tools and techniques**, by making appropriate products available.

Miranda Kavanagh

**Director of Evidence**

# Executive summary

This report presents the evaluation of the Environment Agency public dialogue on flood on flood risk communication, supported by Sciencewise<sup>1</sup>. The objectives of the public dialogue were:

1. Review the current issues surrounding flood risk communication and lessons learnt from other countries or disciplines
2. Co-create, with members of the public, ways of helping individuals and communities to better understand flood risk, link risk to appropriate action, and feel empowered to take action.
3. Help agencies adopt a consistent approach to conveying risk and likelihood, enabling them to join up their subsequent activities.
4. Produce recommendations from members of the public and stakeholders on resources which are likely to result in positive changes to how people think and act in response to flood risk.

The aims of the evaluation were:

- to provide an independent assessment of credibility, effectiveness and success against objectives – process and outcomes including an assessment of impacts on policy and those involved
- to contribute to increasing the effectiveness and use of public dialogue

## Overall findings

The objectives were refined during a lengthy design and commissioning process. Three out of four objectives were fully met: Objective 3 could not have been fully met within a dialogue process, but key stakeholders agreed they were enabled and enthusiastic to work together to implement the messages and findings of the dialogue through a joint action plan.

The successful framing and design of the dialogue reflected a well-resourced scoping stage and realistic timetable. Unforeseen slippage in the project timeframe does not seem to have been a problem. The delay was worth it to get the right locations, experts, public and materials.

The methodology was seen as robust by government, academic and NGO stakeholders. The Sciencewise brand was seen as helpful, as was the scale, location and number of events. In total, the process involved nearly 1,000 participant hours through 90 members of the public in five locations (Leicester, Oxford, Skegness, York and Newtown) for 10 hours (on two days – a Tuesday evening and full day Saturday). A total of 28 participants reconvened for a four-hour workshop in Birmingham with a wider group of experts.

Dialogues were well-structured and delivered in a warm, stimulating atmosphere. The carefully designed participant journey and high ratios of facilitator/rapporteur and experts to participant led to very productive sessions.

Analysis and reporting of findings allowed strong messages to emerge which were seen as very useful by stakeholders in all the many organisations involved with the

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<sup>1</sup> Sciencewise is the UK's national centre for public dialogue for policy making involving science and technology issues, and is funded by the Department for Business, Innovation and Skills (BIS). See [www.sciencewise-erc.org.uk](http://www.sciencewise-erc.org.uk)

project via the large Oversight Group convened and coordinated by the Environment Agency project manager.

## **Impacts**

The Environment Agency project team has already carried out many dissemination activities within the Environment Agency, with other government departments, nongovernmental organisations and corresponding government agencies elsewhere.

Dialogue findings and key messages have already been applied to some Environment Agency processes (flood risk maps, website, flood warning systems) and will be applied to Floodline).

Core messages and specific findings have been applied by Oversight Group member organisations (Welsh Government, Natural Resources Wales, Defra, Department for Communities and Local Government, Cabinet Office and Public Health England) and National Flood Forum policies and documents.

Many specific applications have been identified and will be applied over the next year. Some of the policy opportunities have opened up fortuitously as a result of the longer than expected timeframe of the project and the serious flood events which caused the delays.

## **Specific lessons and messages Overall design and framing**

An extended scoping period (partly due to severe flooding during winter 2013 to 2014) was useful in allowing a comprehensive literature review which fed into an imaginative design and variety of stimulus materials.

The scale, spread of locations and audiences (both those without flood experience and the 'flood literate') left policymakers feeling they had heard from broad publics including the 'hardest to reach'.

Recruitment against very specific requirements (such as flood risk postcodes and experience of flooding) or in locations unfamiliar to market researchers takes longer and needs to be reflected in timings.

A dedicated project website for sharing information and disseminating findings with the public and stakeholders can contribute to openness and transparency, and build credibility in the process.

A reconvened event demonstrating how outputs from round one of the dialogue were already being used impressed participants and led to very high levels of trust in the usefulness of the process. There was also considerable interest in longer term involvement which could be harnessed as a well-informed group for ongoing research and testing of impacts.

## **Workshop design and stimulus materials**

A weekday evening introduction worked well to introduce concepts and maps, establish good group dynamics and provide a baseline snapshot of participant's knowledge of flooding and relative roles and responsibilities. Reconvening on the Saturday three days later provided ample time for participants to do homework and absorb introductory information. Ten hours seemed enough time to cover all the necessary ground and good timekeeping in events meant all sessions began and finished on time and no one felt rushed.

Capturing public views before and after information was provided worked well in demonstrating to participants and policy audiences the journey they had been on and how knowledge and attitudes had changed.

Local tailoring of materials (flood risk context and flood maps) to each location was time-consuming for the Environment Agency project manager, but ensured the public's interest and that local experts considered the process robust.

Group role play and scenarios which took 'characters' from zero/static flood risk to well informed/imminent flood risk situations worked well for most participants and generated comparable data across locations and types of audience. The elderly character raised awareness of the needs of vulnerable individuals. The student character was perhaps less effective.

A 'live' telephone call to a flood helpline also added variety to the stimulus material and focused minds on the needs of vulnerable.

A short video made during the reconvened workshop documented the journey of six participant journeys and the core Environment Agency team. This video was valuable for Oversight Group members who had not attended dialogues and added credibility to the process.

### **Delivery team and experts**

The facilitation and project management team was widely praised by participants and experts as excellent, independent, fair, maintaining focus and sensitive to participant's distressing real experience of flooding. The team's experience of the topic and working with the Environment Agency were important in shaping the design of the dialogue and giving Oversight Group members confidence.

Continuity in the facilitation team between locations was important in tweaking design and building in flexibility. High staffing ratios to participants (1: 3–4) helped capture very rich and comparable data

Some 30 experts participated in the dialogue sessions. The time invested by the Environment Agency project manager in identifying local Environment Agency and local authority staff to attend each session really paid off. All experts found the events very useful in providing new insights, reinforcing anecdotal evidence or experience or building local relationships.

The high ratio of experts to participants meant they could answer most questions and follow through on local issues raised. Answering questions unanswered on Day 1 on Day 2 was time-consuming but showed the team was listening and generated confidence in the process.

### **Governance**

A large, moveable Oversight Group posed challenges for management, coordination, continuity and momentum through such a long project and took up a lot of the project manager's time and project resources. But in this case a well-managed Oversight Group with the right people, at the right levels really broadened the project's impacts.

Continuity and the quality of chairing was cited by Oversight Group members as critical to the success and credibility of the dialogue. The facilitated workshop approach of later meetings helped to re-create a sense of ownership among members and buy-in for a strong finish in the final stages.

Continuous drip-feed dissemination of results and a very active programme of dissemination activities by the project manager meant that there were no real surprises or resistance to the messages that emerged from the dialogue.

# Acknowledgements

The evaluators wish to thank everyone who contributed their views and time to the evaluation.

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# 1 Introduction and background

## 1.1 Introduction

This report presents the findings of the evaluation of the public dialogue on the topic of 'Flood Risk Communication Public Dialogue' commissioned by the Environment Agency in December 2013 with support from Sciencewise<sup>1</sup>

## 1.2 Background context

The institutional and regulatory landscape for managing flood risks in the UK is complex. Important organisations that provide information direct to the public include:

- Environment Agency
- Natural Resources Wales
- Met Office
- local authorities
- flood forums

Local and central government, emergency services, the Environment Agency and other agencies, insurers and individuals also have responsibilities for preventing floods and dealing with the impacts during flood situations and in the aftermath.

Previous projects have identified the continuing confusion in the minds of the public about who does what. The need for the Department for the Environment, Food and Rural Affairs (Defra), the Environment Agency and local government to work together to share consistent information on flooding have been partially addressed through the Local Government Association Flood Portal and the creation of the Lead Local Flood Authorities. The regulatory landscape is set by the EU Floods Directive (2008) transposed in the UK through the Flood Risk Regulations 2009 and the Flood and Water Management Act 2010. The directive requires Member States to develop and update a series of tools for managing all sources of flood risk including through flood hazard maps. For example, the Environment Agency's maps needed updating to show surface water flooding risks so as to meet the regulations.

The Environment Agency and Defra were also aware that other types of flood information were not meeting the needs of people at risk of flood. Regular quantitative surveys show low flood risk awareness among the public and little movement in the numbers of households signed up to Environment Agency's Floodline warning service. Furthermore, small focus groups – often with hostile audiences who have recently suffered the impacts of flooding or who may be affected by specific infrastructure projects – showed that:

- risk communications – particularly the language and techniques used – could be improved
- risk is a difficult concept to explain and flood maps are not always easy to understand

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- there is still confusion among members of the public over responsibilities before and during floods  
relying on people being able to get flood risk information online is a problem as some people are isolated, do not have internet access and are not IT literate
- different personalities react to risk differently
- getting people and communities involved in talking about flood risk increases people's understanding of local flood risk and can help them on a journey towards making preparations to protect themselves against flooding

While many of these messages were not new to practitioners, this research had not gained traction because of the lack of an internal champion. The Environment Agency and Defra therefore felt the time was ripe for a larger, more ambitious qualitative approach. The idea for the dialogue process<sup>1</sup> was developed during 2013. At the Newcastle Science Festival in September 2013, there was a chance to work with members of the public to look at new flood hazard maps which were being developed. Members of the public attending the festival were able to give feedback on how they understood the information presented in the maps and make recommendations for improvements. The Environment Agency and Sciencewise decided that it would be good to be able to involve more members of the public in different areas of the country in discussing how best to communicate about flood risk and encouraging people to take action where possible.

The results of the dialogue project are intended to inform the way that the Environment Agency presents its new maps of flood risk and the way it coordinates with other agencies over these kinds of communications. It will also inform the communication activities of other agencies involved in flood risk communication including the Met Office, Cabinet Office, the Department for Communities and Local Government (DCLG), Public Health England, Defra, the Welsh Government and Natural Resources Wales.

This phase of the project started in November 2013 with the appointment of the delivery contractors, but was delayed by the severe floods of winter 2013 to 2014. As the project extended into 2015, new policy drivers have arisen – partly in response to the floods – and new opportunities for communication with the public on flood risks have presented themselves. The project therefore also looked to have an impact on:

- the evidence for web-based information requirements by the public as required by the Government Digital Service for material published at GOV.UK website
- the Welsh Government Coastal (flooding) Review recommendations to Ministers following the coastal flooding of winter 2014 and its delivery plan
- the procurement of a new flood warning system by the Environment Agency
- a refresh of the Flood and Coastal Erosion Management Strategy (FCERM) 2011 expected in 2016
- the Flood RE initiative by the government and the Association of British Insurers (ABI) to provide flood cover to vulnerable communities in high flood risk areas for the next 25 years

External evaluators, URSUS Consulting Ltd were appointed in December 2013.

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<sup>1</sup> The phrase 'public dialogue' is used in this report to mean: 'a process during which members of the public interact with scientists, stakeholders, and policy makers to deliberate on issues relevant to future policy decisions' (taken from the Sciencewise definition).

# 2 The public dialogue

## 2.1 Introduction

The delivery contractors, 3KQ, working with Collingwood Environmental Partnership (CEP) and Osprey Communications were appointed in November 2013. The core management team included:

- Environment Agency chair
- Environment Agency senior business user
- Environment Agency project manager
- Sciencewise dialogue and engagement specialist (DES)

An Oversight Group was convened and coordinated by the Environment Agency project manager in November 2013, following the guidance given in Sciencewise's 'Recommendations on Running an Advisory Group'. The Oversight Group had already met several times in the spring and summer of 2013 before the delivery consultants were appointed. The OG had the opportunity to discuss the roles of Sciencewise, EA and themselves on several occasions before the dialogue process started. The Oversight Group was tasked with:

- advising on the direction of the project
- helping to inform and shape the dialogue process, ensuring a good mix of participant, representative locations, appropriate design and stimulus materials

The membership of the Oversight Group was ambitious with 18 initial members (see Annex A) including representatives from:

- Cabinet Office Civil Contingencies Secretariat
- Cambridge University
- DCLG
- Defra
- Department for Business, Innovation and Skills (BIS)
- Environment Agency
- Flood Forecasting Centre
- Gloucestershire Council
- Hampshire County Council
- Public Health England
- Lancaster University
- Met Office
- National Flood Forum
- Northumbria University
- Red Cross
- Welsh Government

- Natural Resources Wales

The Environment Agency project manager was responsible for day-to-day management of the project and was the point of contact between the dialogue contractor, Sciencewise and the Oversight Group.

## 2.2 Methodology

### 2.2.1 Literature review and mapping exercise

A high-level literature review focused on public understanding of, and engagement with, flood risk in a number of developed countries. The review brought together evidence emerging from published literature and interviews with key flood risk information providers (Met Office, Flood Forecasting Centre, Environment Agency and Cabinet Office) about the crucial issues in current flood risk communication.

The literature review was shared with the Oversight Group and underpinned the design of the dialogue and stimulus materials. Vital messages included the large number of different routes to the public, types of media, messages, maps, symbols and visuals used. The review highlighted the differences between the provision of information in contexts of 'static' flood risk as well as communications and warning in situations of immediate or 'live' risk. And that the journey from very little knowledge to flood risk, through greater awareness of static risks, does not necessarily lead to action to prepare for and prevent floods.

### 2.2.2 Design and development of stimulus materials

On the basis of the literature review, a workshop for key providers (stakeholder elicitation) was held in February 2014 to:

- test the overall design for the workshops and stimulus materials
  - ensure that the policy audience would see it as a robust and credible process
- The workshop participants included 13 stakeholders from the Cabinet Office, Defra, the Environment Agency, the Flood Forecasting Centre and Gloucestershire County Council, plus the Sciencewise DES, an evaluator and four facilitators.

The workshop discussed the most important outputs from the literature review and mapping exercise and agreed points in the current system that might require strengthening to ensure those at risk from flooding consider taking action. It also started to identify specific areas where public dialogue could potentially assist in shaping improvements.

Outputs from the workshop were used to plan the more detailed dialogue process with the Oversight Group about the types of 'publics' to focus on (for example, location, gender, age, urban/rural, surface/river/tidal flood risk and past flood experience).

### 2.2.3 Round 1 public dialogue events

The Round 1 events were designed to be held in five different locations in England and Wales – Leicester, Newtown, Oxford, Skegness and York – between May and October 2014. Locations were carefully chosen by the Oversight Group and the Environment Agency team to represent a mix of areas that had relatively recent experience of flooding (Oxford and York) and those that were at high risk of flooding of different types but with less recent experience (Leicester – river, surface and ground; Newtown – surface water;

Skegness – coastal). Although Skegness was originally chosen as somewhere that had not experienced flooding, the winter 2014 tidal surge – although not directly impacting homes – meant participants had awareness of flood risk.

Two events were held at each location (10 hours in total): a midweek evening introduction (3.5 hours), followed by a full day Saturday workshop (6.5 hours). Recruitment was subcontracted to a market research recruitment agency. Each workshop aimed to bring together 18 members of the public with over-recruitment of six per workshop to allow for drop out. Participants received a ‘thank you payment’ at the end of both events (£120 plus travel or parking costs for those for the two events in York and Oxford). Participants were told that the dialogue topic was flooding and so could be expected to have some interest, but not necessarily knowledge, in the topic. All workshops were independently facilitated by the 3KQ/CEP team with rapporteurs taking contemporaneous notes on laptops supported by audio recordings at each table.

Over the five locations, 30 experts participated in Day 1 meetings and 25 in Day 2 meetings. Each had their own competences and most were recruited by the Environment Agency project manager for their knowledge of the local area. Each event was also attended by a member of the Environment Agency project management team. All experts were briefed by the facilitation team by telephone and face-to-face before the meetings. At least one expert was available to each table on each day in each location.

**Table 2.1 Participants in Round 1 dialogue events**

<b>Location</b>	<b>Day 1 public</b>	<b>Day 1 specialists</b>	<b>Day 2 public</b>	<b>Day 2 specialists</b>	<b>Round 1 team</b>	<b>Round 2 team</b>
Leicester	23	6	22	5	1 lead	1 lead
Newtown	19	7	17	5	facilitator 1	facilitator 2
Oxford	17	6	16	6	reporter/	support
Skegness	12	4	12	4	support	facilitators 3
York	24	7	23	5	facilitator	reporters
<b>Total</b>	<b>95</b>	<b>30</b>	<b>90</b>	<b>25</b>	<b>2</b>	<b>6</b>

Day 1 at each location introduced participants to the complexity of flood causes and risks, and existing Environment Agency flood maps, with opportunities to question specialists and to request further information or inputs for workshop 2. Between the workshops, participants were encouraged to undertake some ‘homework’ to find out more about flood risks in their area.

Day 2 brought the same group back to consider challenges and choices in flood risk communication in the context of scenarios around three different ‘characters’ – a grandmother living alone, a student and a single mother – to explore their journey from being ‘flood unaware’ to ‘flood literate’ and from static to imminent risk.

The stimulus materials used included:

- introductory printed materials to flood risk and photos developed for the Newcastle pilot
- a talking head video by the Oversight Group Chair introducing the project and its importance to Environment Agency

a PowerPoint explaining the objectives, partners involved and flooding concepts and the historic flood risk context tailored to each location

- video clips on the impacts of flooding
- static flood maps (surface, river or coastal risks) tailored to each location
- a live telephone call to Floodline and use of Environment Agency online communication tools
- scenarios for three characters at different stages of the journey in finding about flood risks (from static to imminent risk)
- flood alert fliers and posters
- property flood risk reports
- personal flood plans

Findings for all five meetings were collated in an interim report (October 2014).

#### **2.2.4 Round 2 public dialogue event**

A reconvened workshop was held in Birmingham on Saturday 22 November 2014 to bring together a sample of members of the public who had attended the first round of workshops with experts in flood risk communications to produce more concrete recommendations to take forward to the final Oversight Group workshop.

The workshop was attended by 28 public participants (4–6 from each of the previous workshops) and representatives from Public Health England, Red Cross, National Flood Forum, BIS-Sciencewise and the Environment Agency. There were 3–4 experts per table, plus a table facilitator and rapporteur. Observers were also present from the University of Birmingham.

A film crew recorded parts of the overall process and recorded vox pops with six members of the public (Skegness 1, Leicester 2, Oxford 2, Newtown 1) and two members of the Environment Agency core management team and the Oversight Group chair.

#### **2.2.5 Oversight Group meetings**

The Oversight Group met before the appointment of the delivery consultants and then met throughout the 18 months implementation of the dialogue process. Initially three meetings were planned but a fourth was added as the project timetable extended.

The initial meeting (London, December 2013) agreed the project's objectives, the policy processes that would be influenced and the broad approach and timing of events.

The second meeting (London, February 2014) reviewed the literature review and agreed the design, criteria for selecting locations and recruitment sample for the dialogue events.

The third (Bristol, October 2014) presented findings from the events and agreed the focus areas and participants for the reconvened event. It also began to scope out an action plan for next steps, including how key stakeholders would take outputs forward.

The fourth (Bristol, February 2015) reviewed the final report, validated the key messages and developed a skeleton action plan, subsequently worked up by the Environment Agency project manager and delivery team.



### **2.2.6 Website and other forms of dissemination**

A project website was launched just before the first of the events and was updated regularly with key messages from completed events.

The Environment Agency project manager also disseminated findings from the project via regular emails to the Oversight Group and experts involved in the workshops and via a Sciencewise webinar.

Papers have been presented and workshops convened for a number of different audiences including the Environment Agency's operational and executive teams, Oversight Group member organisations (Defra, Cabinet Office, DCLG and so on) and for some international audiences such as the Flemish Environment Agency and international conferences (see Annex D).

# 3 Evaluation

## 3.1 Aims

The aim of the evaluation was to provide an independent assessment of the public dialogue's credibility and its effectiveness against its objectives, including an assessment of its impacts.

The evaluation started early (December 2013) and ran alongside the dialogue projects.

The following sections reflect data collection and assessment between December 2013 and March 2015 to answer the following evaluation questions.

- Objectives: has the dialogue met its objectives?
- Good practice: has the dialogue met the Sciencewise principles of good practice?
- Satisfaction: have those involved been satisfied with the dialogue?
- Governance: how successful has the governance of the project been, including the role of the Oversight Group, key providers' groups and the Sciencewise support role?
- Impact: what difference or impact has the dialogue made?
- Costs/benefits: what was the balance overall of the costs and benefits of the dialogue?
- Credibility: was the dialogue process seen by Oversight Group members as suitable and sufficiently credible for them to use the results with confidence?
- Lessons: what are the lessons for the future (what worked well and less well, and more widely)?

## 3.2 Methodology

### 3.2.1 Document review

Comments were submitted to the Environment Agency project management team and delivery team by email or in person, as appropriate on:

- review of all written correspondence (email traffic and attachments) and working documents such as the literature review, press releases and blogs, website statements, briefing materials, drafts of stimulus materials, key messages reports, recruitment brief and locations for dialogues
- review of project outputs including:
  - a report on the key providers' workshop
  - draft interim report
  - final interim report and appendices
  - draft final report
  - draft action plan

### **3.2.2 Observation**

The evaluators directly observed a variety of events and meetings including:

- Oversight Group meetings – four between December 2013 and February 2015
- public dialogue events – seven (Leicester 1 and 2, Oxford 1 and 2, York 2, Newtown 2 and Birmingham reconvened event)
- a workshop for key providers (stakeholder elicitation) in February 2014
- face-to-face and teleconference delivery team/Environment Agency project management team meetings in London and briefing of expert participants prior to Leicester and Oxford public dialogue events
- Sciencewise wash-up meeting in March 2015

### **3.2.3 Questionnaires**

Evaluation questionnaires were completed by public and expert participants at the end of Round 1 Day 2 events (and by email for experts who only attended the first evening event). The summary results for 89 public participants (out of 90 participants for Day 2) and 27 specialists are shown in Annex B.

For other events a more informal approach was taken. The stakeholder workshop was assessed against three questions:

- Did the workshop achieve its objectives?
- Did participants feel they had influenced dialogue design?
- Did participants feel the public dialogue would impact on policy and processes?

The reconvened event was evaluated by a facilitator-led discussion of:

- what participants had taken from the previous events
- what they took away from the third event
- what they took away from the whole process

### **3.2.4 Face-to-face interviews**

Stakeholder interviews were conducted at important points through the dialogue.

Informal baseline interviews around Oversight Group meetings established the context for the dialogue events, although nine out of the 18 original members were no longer involved by the end. About 10 informal public participant interviews were carried out in the margins of the public events themselves.

A total of 12 structured interviews were carried out with members of the Oversight Group and experts who had taken part in the events after the final report and final Oversight Group meeting to discuss this report. These interviews focused on:

- how the project had met its objectives
- emerging impacts (expected and unexpected) on their organisation's policies and processes for communication
- the robustness of the methodology
- the role and effectiveness of governance arrangements

# 4 Objectives

This section presents findings on how far the project delivered its objectives and whether these were clear and specific, clearly communicated to participants, and with specific aims for each element of the process.

## 4.1 Framing of objectives

The original study objectives were:

- To co-create with the public ways of helping individuals and communities better understand and engage with their risk, using innovative activities, language, numbers, products or representations, resulting in a change to the perception of risk. This includes the need to convey a scale of flood likelihood, which will be used to present Flood Risk Regulations mapping.
- To identify ways of getting individuals and communities to own their risks, to link risk to action and to feel empowered to take action to reduce the impact of all types of flooding and extreme rainfall.

Objectives were refined at the first Oversight Group meeting to make them clearer and easier to evaluate.

- (1) Review the current issues surrounding flood risk communication and lessons learnt from other countries or disciplines.
- (2) Co-create, with members of the public, ways of helping individuals and communities, to:
  - a) better understand flood risk
  - b) link risk to appropriate action
  - c) feel empowered to take action
- (3) Help agencies adopt a consistent approach to conveying risk and likelihood, enabling them to join up their subsequent activities.
- (4) Produce recommendations from members of the public and stakeholders on resources which are likely to result in positive changes to how people think and act in response to flood risk.

There was lively discussion about the use of the word 'co-create' in objective 2. This word was used to highlight that this was not a traditional market research project to test pre-prepared materials. Rather it was an opportunity for iterative dialogue between the public and experts around information needs and the chance for the public to propose radical changes to the way that information is provided to different audiences.

Table 4.1 summarises how the most important elements of the project were intended to achieve these objectives.

<b>Table 4.1 How overall objectives are reflected in process elements</b>		
<b>Process elements</b>	<b>Specific objectives</b>	<b>Fit with overall objectives</b>
Literature and methods review	To review the current issues surrounding flood risk communication in the UK through interviews with key stakeholders and review of literature about risk communication.	(1)
Key providers' workshop	To consider and discuss outputs from the literature and methods review, and agree points in the current system of flood risk communications that require strengthening to ensure those at risk from flooding consider taking action.	(1) (2) a, b, c (3)
	To identify specific areas where public dialogue can potentially assist in shaping improvements and provide raw materials for designing the process and stimulus materials.	
Round 1 public dialogues	To consider ways of helping individuals and communities to: <ul style="list-style-type: none"> <li>• better understand flood risk</li> <li>• link risk to appropriate action</li> <li>• feel empowered to take action</li> </ul> To give members of the public, scientists and decision-makers a chance to talk one to one and in small groups to gain in-depth understanding of others' needs, hopes and fears.	(2) a, b, c
Round 2 reconvened event	To provide an opportunity for members of the public who attended the first round of workshops to meet again with specialists in flood risk communications to further discuss issues and dilemmas.	(2) a, b, c (4)
Oversight Group meetings 3 and 4	To consider findings from Round 1 and 2 meetings and agree an action plan for how these would be taken forward within and between organisations.	(3)

## 4.2 Participant understanding of objectives

The objectives of the project, the dialogue and how the results would be used were clearly presented at the workshops with time allowed for clarification questions. Based on learning from the first event in Leicester, the objectives were reiterated on Day 2.

The evaluation questionnaires found that almost all participants (98%, 87 out of 89) had a clear understanding of the purpose of the workshop and the same percentage (98%) agreed strongly that the process was likely to be taken into consideration by Environment Agency. This was a real endorsement of the dialogue events having met their objectives.

## 4.3 Overall achievement of objectives

### Objective 1

Objective 1 was achieved through the scoping stage literature review and key providers' workshop.

The literature review was discussed at Oversight Group meeting 2 and disseminated before the stakeholder workshop for comment.

More time and resource was spent on scoping than in many dialogue projects, but all policy stakeholders interviewed agreed that the results were a very comprehensive review and a clear focus on crucial issues that helped shaped the dialogue design – namely the disconnect between knowledge/understanding of flood risks, feeling enabled and actually taking preventative action. It also highlighted the confusion over the roles and responsibilities of all those involved in managing flood risks.

A few stakeholders remarked that the literature review was stronger on understanding the UK flood context and less comprehensive on learning lessons from other countries or disciplines. However, this was not seen as an issue for the shaping of the project.

### Objective 2

All stakeholders interviewed (12) agreed that the project had been very successful in achieving this objective through the two rounds of dialogue events.

The interim report pulled together a lot of material – some of it conflicting – from the 10 days of Round 1 workshops. This material was then used to develop the agenda and new materials for the reconvened workshop.

A huge number of specific recommendations were collected from the final event on content and dissemination of online flood maps, short awareness raising videos, printed materials for raising awareness and spurring action (flood destroys poster, leaflets), designing a new flood warning service, and an information letter to accompany Flood RE insurance renewals. The volume and richness of the information and insights generated was noted as very positive by experts and policy stakeholders.

The scale of the dialogue, the sampling of participants and the design of workshops were seen as key factors in their success. Most felt that the outcomes had been co-created in their broadest sense, with participants actively contributing to a wide range of communication techniques and products rather than creating a single brand-new product from a blank sheet. Instead the process was described as:

'more iterative, like ping pong, we presented, the public made suggestions, we took these on board and they commented on the results'.

### Objective 3

Objective 3 was expected to be achieved mainly through the joint action plan developed during and after the final Oversight Group meeting. Those interviewed felt the ambitious composition of the Oversight Group had been very effective in getting all the necessary agencies round the table; this had created high expectations and a willingness to cooperate, enabling a consistent approach. But within the scope of a dialogue project, stakeholders agreed it would never be possible to actually achieve consistent approaches

across all organisations. The proof will be in how well the action plan has been implemented when Oversight Group members meet again to review progress.

Within the Environment Agency, stakeholders highlighted the time and resources that will be required to develop and disseminate core messages and feed detailed findings into different flood warning, information systems and communication products. In the words of one participant, 'the challenge now is how we reflect all this wealth of material in what we do'.

While the messages have been well received by all the Environment Agency staff who participated in dialogues or dissemination events organised by the Environment Agency project manager, stakeholders highlighted the risks of institutional inertia being a barrier to ensuring a consistent approach in all parts of the country.

## **Objective 4**

The final reconvened workshop and final Oversight Group meeting were designed to produce recommendations from members of the public and stakeholders on resources which are likely to result in positive changes to how people think and act in response to flood risk.

The workshop produced a wealth of recommendations on:

- written fliers and videos
- next generation flood maps (mocked up based on participants' recommendations from round 1 workshops)
- health impacts
- an insurance renewals insert letter
- future flood warning service

The high level recommendations and core messages were validated at Oversight Group meeting 4.

All those interviewed agreed that this objective had been successfully met.

# 5 Dialogue design and delivery

This section presents the evaluation findings on the design and delivery of the dialogue process and whether it met the Sciencewise principles of good practice. Specifically, this section examines whether:

- the choice of locations was clear, and representation was of a scale and mix for results to be generalisable
- the workshops were well designed so that the design flowed and there was sufficient time for deliberation
- the stimulus materials presented were balanced, accessible and engaging enough for the participants to act as informed citizens
- the facilitator team was professional, well briefed, consistent and unbiased, and enabled all participants to make an active contribution
- it worked to have specialists involved to provide information and trust in the process

## 5.1 Scale and representativeness

The rationale for choice of locations was clear, reflecting the Oversight Group's criteria of geographical spread (Wales, north and south of England) and types of flood risk (surface, river and coastal). The spread of flood risks was considered important for testing different types of flood map. The inclusion of Newtown in Wales caused a delay of several months in the completion of the project since the session could not be scheduled until after the summer holidays. Policymakers considered the numbers and spread of locations robust. However, though one stakeholder felt that the scale and sampling of all types of flood risk had been 'the gold-standard in terms of numbers and mix of flood risk types'. Generalisable results could probably have been produced from a smaller sample.

Identifying and agreeing locations among the wider stakeholder group and with local Environment Agency offices took a number of iterations. Identifying and getting buy-in from local Environment Agency offices and other local experts (local authorities and resilience groups) took up a lot of the Environment Agency project manager's time, but paid dividends.

The mix of participants overall was similar to the recruitment brief and quotas for sociodemographic characteristics (age, gender, ethnicity and socioeconomic group) representative of each area, and with up to a third of individuals active in their communities (Table 5.1). There was a good mix in four out of the five locations with representation of Asian communities in Leicester and Welsh speakers in Newtown particularly strong. In Oxford, older age groups were slightly over-represented. In Skegness, lower than planned numbers meant the group was skewed to lower socioeconomic groups.

Over-recruitment to allow for dropout meant that numbers were higher than expected (22 each) in two venues (Leicester and York). A total of 95 participants attended Day 1 and 90 returned for Day 2. One person cited insufficient English as the reason for dropping out, while several others cited illness and personal family reasons. Almost all participants (97%, 87 out of 89) agreed that the recruitment process and pre-information had been well-handled.



**Table 5.1 Characteristics of participants**

Location	SEC <sup>1</sup>	Age	Urban/ rural	Gender	Previous flood risk
Leicester	AB: 6	18–34: 4	All from Leicester (urban)	M: 11	All had no flood experience in their current home, garden, garage, business or work premises since 2003
	C1C2: 10	35–54: 13		F: 12	
	DE: 7	55+: 6			
Oxford	AB: 3	18–34: 2	From Oxford or surrounding areas (mixed urban/rural)	M: 8	All had experienced flooding in their homes between 2003 and 2012.
	C1C2: 12	35–54: 6		F: 9	
	DE: 2	55+: 9			
York	AB: 3	18–34: 6	From York, Leeds or surrounding areas (mixed urban/rural)	M: 9	All had experienced flooding in their homes between 2003 and 2012.
	C1C2: 19	35–54: 8		F: 15	
	DE: 2	55+: 10			
Skegness	AB: 2	18–34: 7	All from Skegness (urban)	M: 7	All had no flood experience in their current home, garden, garage, business or work premises since 2003
	C1C2: 5	35–54: 3		F: 5	
	DE: 5	55+: 2			
Newtown	AB: 1	18–34: 7	From Newtown or surrounding areas (mainly rural)	M: 9	All had no flood experience in their current home, garden, garage, business or work premises since 2003
	C1C2: 15	35–54: 7		F: 10	
	DE: 3	55+: 5			

Notes: <sup>1</sup> Socioeconomic classification

<sup>2</sup> Black, Asian and Minority Ethnic (BAME): Recruitment was broadly representative of local communities but specific data on BAME was not collected

Recruitment in Skegness was difficult because of local circumstances that might have been predicted if the recruitment agency had known the area.<sup>1</sup> With more warning the contractors could have been flexible in reorganising Day 2 and to get a larger, more mixed turnout. Lessons were learnt and recruitment for the final workshops in Newtown started much earlier.

The average group size (17–22) felt comfortable. Most discussions were in groups of eight who stayed together throughout Day 2. Table groups were not segmented by level of educational attainment and this did not seem to stop anyone contributing. The meeting in Skegness felt small to the experts involved, but the core management team found that the size and mix of groups and the facilitator and expert ratio were very helpful in getting lively

<sup>1</sup> Many properties within the flood risk areas are holiday bed and breakfast establishments, and Saturday is changeover day. People could have participated if the six-hour Day 2 session had started after 12 pm.

participation from a hard-to-reach group. This allowed them to explore some issues in much greater depth and provided very useful insights.

Group dynamics were good in all locations, largely due to the methodologies used and warm style of facilitation. No individuals were allowed to dominate discussions and the facilitators used several mechanisms for drawing out quieter participants:

- working in pairs
- probing what each person thought
- using individual notebooks to capture additional thoughts

Experts felt that participants were treated equally and that they were motivated and interested, though in Skegness 'some may have drifted later on during the day'. At the reconvened workshop, little warmup was needed as all public participants already knew a handful of other participants.

The value of holding events at the weekend and paying incentive payments so as to engage with an otherwise 'hard to reach' demographic was appreciated by participating experts:

'The strength of this project has been the scale and types of audience reached'.

#### **Expert views on participation**

'Everyone contributed well on each of the tables' (expert attending several sessions)

'There appeared to be a lack of representation from professional groups' (Skegness)

'Sadly not quite enough/mix of people - really wanted some B+B and caravan people (recruitment agency problem)'. (Skegness)

'Shame that not as many turned up as hoped for' (Skegness)

#### **Lessons learnt**

- It's important that recruitment companies have local representatives or an understanding of the local context and provide ample warning of any difficulties to allow for flexibility in recruitment or design.
- More time is needed for recruitment where the requirements are very specific (for example, postcodes or past experiences).
- A fixed recruitment incentive across all venues can make it difficult to recruit professionals (as opposed to the retired or students) in more prosperous locations (Oxford and York).
- In the event, four locations would probably have been enough as it proved more important to get a good mix of 'flood literate' and 'flood unaware' participants than representation of all possible types of flood risk.
- Smaller than expected groups of lower socioeconomic segments unexpectedly allowed really in-depth and insightful discussions with a group that Environment Agency finds hard to reach and who might have contributed less in larger groups.

## 5.2 Credible techniques and stimulus materials

The design was informed by the literature review and stakeholder workshop, which piloted the scenarios and characters approach. It used the following structure, techniques and materials.

Day 1 was a three-hour introductory session highlighting:

- the role of all agencies involved in flood communications
- all stages of flood risk (static, alert and imminent threat)
- different types of flooding

Two warm-up exercises worked well to identify:

- how much participants already knew about flooding, where to find information and responsibilities for protecting their properties
- individual's past experiences of flooding

Presentations by the facilitator were backed up by handouts on Day 1. The homework task to find out about more about flood risk in their own areas was completed by the vast majority of participants and reinforced the introductory session.

Day 2 was a full day with the methodology focused on group role play around three 'characters' (a student, a single parent and a pensioner) on scenarios which followed their journey from zero awareness of static flood risks to high awareness of imminent risks. The scenarios also involved accessing some Environment Agency flood communication products online (maps, flood warning systems and Floodline) and a live telephone call to a helpline. Each scenario tested the usefulness and understanding of different channels and types of information. It also got people to explore what they would think, feel and do both 'in character' and as themselves in each situation and what changes they felt were needed.

Scenarios were supplemented with internet video clips on different treatments of risks, and the impacts of flooding and actions that people should take to recover from floods. The final session explored the groups' priorities for the Environment Agency and others to address to improve flood communications. All data captured during the events were reflected in the draft final report.

The workshop design and the variety of techniques and materials used were creative, credible and engaging. The design of sessions and timing allowed participants time and space to:

- become informed
  - be able to reflect on their own and others' views
  - explore issues in depth with other participants
- Specific findings are summarised below.

The warm-up exercises (kinetic, talking in small groups and introducing each other, sharing flood experiences) all led to very positive group dynamics by the end of Day 1.

The group role play scenarios provided a creative and consistent structure for asking questions, providing information and collecting feedback. The scenarios worked well for most participants – both 'flood literate' and 'flood unaware' – because they imposed a structured journey and explored the links between knowledge, feelings and action and the challenges at each stage. No negative feedback was received from participants on this role play and many reported that they found it particularly useful to think about the needs of vulnerable individuals in the community and how they could help them. Some experts felt that the 'characters' worked less well for those with previous flood experience (see box

below) and that the student character was hard for people to identify with. However, other stakeholders reported that they would be interested in using these characters and scenarios in other ways (for example, for running workshops with high risk communities or for testing customer journeys through flood information on websites and flood warning systems).

Participants felt well informed enough to be able to make recommendations. The workshops made use of a good mix of engaging materials that most individuals found easy to understand. The information presented was not contentious, but it was complex and new to most participants. Materials were seen as balanced by all participants (100%, 89 out of 89) in all locations. People felt they had been provided with about the right amount of information in an accessible format. Individual responses highlighted the important message that different groups have different information needs and preferences. Specialists agreed that the range of issues covered was balanced and found different sessions particularly useful.

The exception was the Environment Agency local flood risk maps (surface, river and tidal flooding) presented on Day 1, which many participants reported were hard to understand. But testing these maps was very much a central purpose of the dialogues. The dialogues confirmed that most people find the maps difficult to read and the concepts of risk probability and presentation (colour contours on maps) difficult to understand. Recommendations that flood risk could be presented in other forms (for example, at individual house postcode level), with historic data (photos and past flood marks) and with links to sources of information on action were central findings from the dialogues.

The only criticism of material was of the presentation about different types of flood risk. One expert commented that 'this could have been shorter and more location specific' and another that 'the PowerPoint presentations were mainly words – this is boring and bad practice'.

The video about the aftermath of flooding was hard-hitting and emotional for some people with flood experience, but resonated well with the majority. The appetite for receiving quite shocking messages, if accompanied with opportunities for taking action, surprised some experts.

Generally the time spent on each issue and stage of the scenarios seemed balanced, and timekeeping by the lead and table facilitators was excellent. After the first event, minor changes in timing and combining some sessions to avoid duplication allowed others to run a little longer and gave the facilitators more scope for time spent on the issues of most importance for their group. Overall, 97% of participants (87 out of 89) felt they had sufficient time to discuss issues in the Round 1 workshops. The only area where a few felt more time could have been spent was on flood maps on Day 1. For the reconvened events, most participants felt the time was about right, but a few felt would have liked to spend longer on most sessions.

A few experts felt that time was short for covering some of the big issues and Day 2 could easily have been extended but that a whole weekend would have been too long. One participant noted 'wasn't really looking forward to six hours today but time went quickly with good discussions'.

All but one participant (88 out of 89) felt that they had been able to contribute their views and that they were provided with enough, fair and balanced information to do so. Individual worksheets gave people the option to work individually if they preferred, but most participants preferred to work in pairs or groups.

## Lessons learnt

- A weekday evening introductory meeting worked well, providing long enough to introduce the concepts, create a good group dynamic and allow some hands on experience with maps.
- Reconvening three days later allowed time for participants to absorb introductory information, with a homework task to reinforce and build on understanding.
- Capturing public views before and after information was provided worked well in demonstrating the journey participants had been on.
- Local tailoring of materials (maps, fliers, posters) to each location was time-consuming for the project manager but ensured relevance and interest to participants – and meant that local experts considered the process robust.
- The project website and homework task were useful in reinforcing the learning from the introductory session and a number of participants signed up to Floodline as a result.
- The live telephone call worked well and focused participant's minds on the needs of the vulnerable (elderly, hard of hearing, English as a second language and so on) and those without access to the internet.
- Group role play and scenarios worked well for most participants in learning about flood risk and probing constraints to taking action. A great deal of comparable information was generated which could be disaggregated by 'flood literate' and 'flood unaware' groups. Some groups may have worked better if they had been selected to be most like the 'characters' (for example, under 34s for Samir character).
- The video made at the reconvened event was useful in conveying the style of the workshops and highlighted the journey of participants to senior policymakers from the Oversight Group, few of whom were able to attend the first round event.

### Expert views on what worked best ...

'The session at the beginning where we had to get up and form a line about who had been affected by flooding. This got everyone talking to each other and put everyone at ease'.

'Session on what people thought of flood maps'

'I think the interactive flood map session on the Tuesday evening was particularly useful'.

'Getting people to be very honest about what they think about flood maps (and our communications) worked very well'.

'Critiques of materials – brilliant. Real knowledge about what real people do – Radio 1, not local radio and so on. Fire risk – they never talk about risk'.

### And what worked least well ...

'Scenario of student Samir as that group struggled to put themselves in his shoes as to realistic scenarios'

'Felt some of the conversations around the imaginary characters were a bit forced. Better engagement achieved when people reflected on their own circumstances'.

'Trying to get participants (or at least some of them) to think in character'

'I think people had difficulty thinking themselves into the persona (for example, Edna and Samir). In the Samir group, no one was a Twitter or Facebook user and so could not comment on how he would use these tools'.

'Presumably you use the persona to get people talking in a non-intrusive way and focus conversation ... however in this seminar I think people were happy to share

<p>'Hearing a real Floodline call'</p> <p>'Having different characters was quite good as people didn't need to talk as if it was just them'</p> <p>'Discussion groups with limited, but clarifying input from specialist'</p>	<p>their own experiences/view'.</p> <p>'The map activity of Tuesday was difficult as we were looking at paper versions of an interactive website'.</p>
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### 5.3 Role of experts

There was a good ratio (>1 to 6–8) of well-briefed experts for each dialogue. Although there was substantial turnover of experts between the Tuesday and Saturday sessions, this did not detract from participant views of the usefulness of experts.

Experts were in listening mode and did not attempt to correct all comments, but answered questions when asked and used notepads to record useful observations. Experts provided detailed feedback on what they had heard to the facilitation team. A total of 27 experts completed post event evaluation forms.

Numerous opportunities were timetabled into table discussions and the plenary for asking questions. Questions were either answered in the room by experts, or collated and answers prepared by the Environment Agency project manager and core management team and answered at a moveable session on Day 2.

Expert inputs were appropriate and did not distract from public discussions. People were clear who was participating and who was not. All participants (100%, 89 out of 89) found the experts present helpful in answering questions (see box below). Furthermore 99% of participants (88 out of 89) felt that they could ask questions easily and get appropriate answers.

Despite some initial hesitancy about the workshops by local experts, they all reported that they had found the experience really valuable and the findings either eye-opening or affirming what they already knew anecdotally.

<p><b>Lessons learnt</b></p> <ul style="list-style-type: none"> <li>• The considerable time invested by the Environment Agency project manager in identifying local Environment Agency and Local Authority staff to attend each session really paid off.</li> <li>• The high ratio of experts to participants meant they were able to discuss local issues in depth and in some cases have been able to follow through on local issues raised (see impacts).</li> <li>• Answering questions on Day 2 demonstrated additional work had been done by the team and generated confidence in the process.</li> </ul>
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Participants views on the role of experts	Expert views on participating
<p>'So glad specialists attended'.</p> <p>'Specialists were very knowledgeable and open to questions'</p> <p>'I felt very easy talking to experts in our group'</p> <p>'Willing to go back over things'</p> <p>'Very helpful'</p> <p>'Specialists were very knowledgeable and open to questions'</p> <p>'Excellent'</p>	<p>'I felt all the experts felt comfortable going in to the 'neutral zone' (that is, I didn't feel the need to defend what we do) and I think this helped the public and experts come together as a group with a common cause'.</p> <p>'Moving us around the tables helped get a broader view from those involved'</p>

## 5.4 Independent and competent facilitation

A facilitation team of six attended each Day 2 event (except in Skegness). The team consisted of a lead facilitator, two additional table facilitators and a note-taker (contemporaneous typing and recording for back up) for each group of 6–8. The two lead facilitators and project manager both attended the reconvened event and all Oversight Group meetings.

The key findings were that as follows.

There was unanimous agreement among participants (100%, 89 out of 89) that the facilitation was independent, professional and effective in all five locations.

There was strength and depth in the delivery team with continuity across all events. The team also included consultants with expertise in flooding and experience of working with Environment Agency. Their role was reflected in the design of workshops and materials, and ensuring that the team was well briefed and fully up to speed on flood issues.

The facilitation team was highly professional, neutral and with a very approachable style. There was continuity between Day 1 and Day 2 lead facilitators in all locations. Facilitators maintained the focus and kept the discussions moving.

The boundary between running the process with technical issues deferred to experts was very clear, although two experts felt that the introduction to flood issues would have come better from an expert.

The learning environment was warm and fun and participants thoroughly enjoyed it (see Section 6).

All participants were treated respectfully. The issues involved were emotive for some participants with particular flood experiences. In Oxford and York, almost two-thirds had direct experience of flooding. Facilitators redesigned the warm-up sessions accordingly and were alert to the impacts of stimulus materials on participants. In one case when a participant was clearly upset by their flood memories, this was dealt with very sensitively. All participants were given space to contribute and no-one was allowed to dominate discussions. Experts all agreed that participants were treated equally and were kept motivated, interested and committed.

Inputs were captured systematically by table rapporteurs and experts on note pads.

Excellent time keeping meant very few participants felt that sessions had been squeezed or their questions hadn't been answered.

**Lessons learnt**

- Continuity in the team between locations was important in allowing the team to carry forward lessons, anticipate potential sensitivities and build in flexibility to timings between locations.
- Inclusion of topic experts in the facilitation team meant they were able to probe responses.
- Smaller groups and working in pairs was a useful methodological device to encourage involvement of some of the quieter participants.
- The high ratio of delivery team to participants (1:3 or 4) led to capture of very rich qualitative data at each meeting;
- Good timekeeping meant that all sessions began and finished on time and no one felt rushed.

**Public views on facilitation**

'Facilitated really well'  
 'Excellent facilitator/facilitations'  
 'Very good facilitator, moved us on when needed'.  
 'The meeting was well chaired and coordinated'.  
 'Absolutely fantastic leadership'  
 'Well run and well chaired'  
 'Strong leadership from the facilitator'  
 'Very well organised'  
 'Enjoyed participating. Helped me come to terms with my own 'ghosts'.  
 'The event was informative and allowed all views to be aired'.

**Expert views**

'The whole exercise benefitted from the particularly friendly and relaxed tone that was set by the entire group of facilitators'.  
 'The participants were put at ease - they were the focus and they were listened to not talked at!'  
 'Kept messages focused ... important that facilitator directed discussion which led to structured debate'.  
 'Some of the technical flood information presented to the group was done by the facilitator and I think it could have been better presented by one of the experts (assuming technical aspects were covered in a non-technical way)'.  
 'I thought the facilitator was a bit leading at one point: 'Do you agree that you are more aware of the river than people living in more urban areas?' The way it was said made it difficult for the group to disagree'.



## 5.5 Dissemination of results

The project website was used to report back to participants on the dialogue process, including a summary of outcomes from each event.

At the reconvened events, the introductory sessions provided feedback on how findings so far had fed into Environment Agency policies and processes, and mocked up materials (maps and flyers). Other sessions focused on issues suggested by participants in Round 1. The final report will be shared on the project and Sciencewise websites.

### Lessons learnt

- Of the 8 participants informally interviewed at the reconvened session all had been impressed to see how their inputs had already been used.
- There was widespread interest in longer term involvement. This well-informed group could usefully be reconvened – face to face or virtually – to act as sounding board for piloting new materials and to assess the longer term impacts of the dialogues on commitment to take action.

## 5.6 Organisation and venue

The event organisation was exemplary. No concerns were raised by participants about the organisation, logistics or choice of venue.

All six public dialogue locations were easily accessible by public transport and walking, and had disability access.

Participants were made to feel welcome. All had clearly visible name badges.

Ample food and beverages were provided, including a good range of healthy and vegetarian options in all locations.

Rooms and materials were prepared well in advance, with the facilitation team travelling up the night before for Saturday meetings.

All presentations were visible and audible, and where technology was used (access to websites and telephone helplines), it had been checked in advance.

The only negative comments related to the York venue (a next door restaurant had a noisy event on the balcony outside the window ('The drumming outside was terrible' 'the noise of the drums was difficult in the morning')). The delivery team were able to move small groups to quieter rooms in the afternoon.

# 6 Satisfaction levels

This section evaluates whether those involved were satisfied with the dialogue process. It covers the perspectives of three groups: the public, experts and stakeholders.

## 6.1 Public participants

Participants were unanimous in their agreement that they were satisfied with the Round 1 events (with 80 out of 89 strongly agreeing). In all five locations people reported that they had enjoyed the experience, and that events had been well run, interesting and useful. They particularly enjoyed meeting people from different situations with personal experience of flooding. Typical comments are highlighted in the WordCloud shown in Figure 6.1. There were no negative comments about the experience, even in Oxford and York, where participants had recent experience of flooding and stakeholders were initially concerned that this would colour their views. Participants in the reconvened event reported informally that they had really enjoyed the event and been impressed how things had moved on (see box below.)



**Figure 6.1 Selected comments from participants caught on a WordCloud Public’s satisfaction with Round 1 events**

<p>‘It’s good to share public views’.</p> <p>I felt my contribution was of value and interest to the experts’</p> <p>‘Enjoyed participating’.</p> <p>‘Helped me come to terms with my own ‘ghosts’.’</p> <p>‘They are asking people how they can Help everyone which is good’</p>	<p>‘Have never done anything like this but I have gained invaluable information’.</p> <p>‘Empowering!’</p> <p>‘Makes me feel the Environment Agency is on my side’.</p> <p>‘Really useful having people give their experiences’</p> <p>‘Would be useful to give more information about flood products’</p>
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<p><b>Public satisfaction with reconvened workshop:</b></p> <p>‘So much information from both sessions that I really wasn’t aware of’.</p> <p>‘The opportunity to be here was really something’.</p> <p>‘Amazing how much professionals have been doing behind the scenes’.</p> <p>‘Nice to know they are really listening’.</p>	<p><b>And take away messages ...</b></p> <p>‘Thinking about neighbours’.</p> <p>‘Simplifying the maps would be a really good thing’.</p> <p>‘Map prototypes are so much better and really reflect what we said’.</p> <p>‘Seeing that something has really happened from the feedback that we gave’.</p>
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The events also met the Sciencewise good practice principle that those involved in the process are enabled to increase their knowledge and understanding of the subject under discussion. Almost all (95%, 80 out of 89) of the public participants in the first round dialogues felt that they had learnt something new about flooding. This was overwhelmingly the case among ‘flood unaware’ participants (in Leicester, Skegness and Newtown), but also true of ‘flood literate’ participants (Oxford and York). This was despite many who had recent personal experiences of flooding and feeling they already knew quite a lot. Informal self-assessment by participants on Day 1, revisited at the end of Day 2, underlined the useful journey of almost all participants from limited to far greater knowledge of flood issues, where to get information and of their own responsibility to protect their property (see Annex C).

The most important areas of learning cited were:

- the variety of different types and severity of floods
- where to get flood risk information
- how to sign up for Floodline
- how to take action to prepare for flooding and protect their property Typical comments are given in the box below.

<p><b>Public’s views on learning from Round 1 events</b></p> <p>‘Excellent workshop, useful for information’</p> <p>‘I have learnt a lot and know what advice to give others and where to get more</p> <p>‘made me more aware about floods’</p> <p>‘Oddly enjoyable day, I learnt a lot’.</p> <p>‘The event was informative and allowed views to be aired’.</p>	<p>‘I felt it was very useful and I learnt a lot about flooding’.</p> <p>‘Fantastic learning curve’</p> <p>‘Fantastic session, really informative’</p> <p>‘It was totally informative and now feel much more in touch with what to do in the event of future flooding</p> <p>‘Excellent 2 day event, very informative and information myself’.</p>
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Facilitator debriefing on why participants had moved from their starting point was particularly useful in:

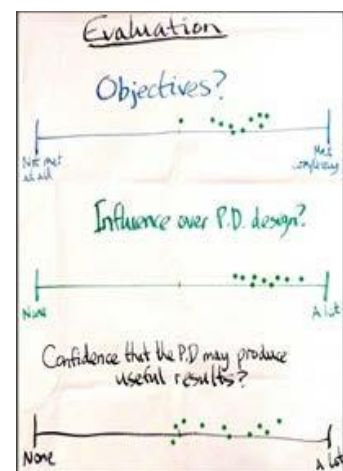
- highlighting their initial lack of understanding of central and local government and personal responsibilities
- probing how understanding this made participants feel more able and willing to take preventative action

## 6.2 Experts

Satisfaction levels were also high among participants in the key providers' workshop and the 27 experts who completed questionnaires for Round 1 dialogues. For the initial event, nine out of 10 participants agreed that the workshop was likely to have some real influence over the public dialogue design and were all confident that the dialogue process would produce some useful results.

Experts who attended the dialogues reported they had learnt a lot and gained valuable insights. Although a number of participants felt that the findings themselves may not have been very surprising or new, all respondents (27 out of 27) found the sessions useful and in particular welcomed the opportunity to meet people from a mix of backgrounds and flood experiences. Particularly valued was the chance to talk:

- in depth to 'hard to reach flood unaware' audiences and hear how they articulated their needs and made analogies to other emergency risk areas such as fire
- to those with flood experience in a less charged atmosphere than normal community meetings



The comments below demonstrate the lessons taken from the process and recognition of the importance of a well-structured event and safe space to have real dialogue with people.

<p><b>Experts overall satisfaction with Round 1 events</b></p> <p>'The questions section on the evening session was enlightening'.</p> <p>'Both presentations and interactive activities worked well'.</p> <p>'Group discussions went very well. Groups of 8 or so seemed perfect. Well facilitated'</p> <p>'Good pace, enthusiasm, listening'</p> <p>'Very professional and well structured'</p> <p>'Togetherness of the group. Strong leadership from the facilitator'</p> <p>'Very well organised'</p> <p>'Valuable lesson in just how powerful the exercise of 'listening' is. Would like to employ similar exercise'.</p> <p>'Renewed contacts with local people who I have not seen for a while and things that need following up on'.</p> <p>'Lots of lessons to learn on organising good workshops'</p> <p>'Excellent opportunity to gain an insight at the ground/local level'</p> <p>'Confirmation that 'traditional' methods of engagement are hugely worthwhile'.</p> <p>'Event well-orchestrated'</p>	<p><b>And lessons learnt ...</b></p> <p>'As a public servant working at head office I don't often meet the public, so really refreshing to do so and to see and hear for myself how our information on flood risk is used and interpreted'.</p> <p>'When else would we get such an opportunity to really talk to the public about what they really need?'</p> <p>'Professionally listening to views of residents in urban areas who haven't flooded and realising how little they know'</p> <p>'Hearing the views and experiences of people who were unfortunate enough to flood'</p> <p>'The chance to listen to real people instead of what councillors and management thinks those people need to hear'</p> <p>'Gained more of an insight of how people respond to flooding information'</p> <p>'Really good insight into public knowledge/perception re flooding'</p> <p>'It was very interesting to me to find out what actually is important to the public. They want punchy information and advice not a 'sell' from us'.</p> <p>'It was good to see the things that I hear in my day to day job being recognised officially. I hope that the opinions given by the public are acted upon'.</p>
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Wider stakeholders were able to participate in a one-hour webinar hosted by Sciencewise in November 2014. The webinar on 'Public communication and engagement on risk' was delivered by the Environment Agency project manager to BIS and Sciencewise stakeholders. A total of 63 people registered, 37 attended on the day and 14 completed an online evaluation survey. Of these 93% were very satisfied and 7% quite satisfied with the webinar overall; 83% of respondents rated the webinar content as very good while 17% thought it was good. Among the reasons given for rating the webinar so positively, a number of respondents noted that they found the webinar to be 'interesting and informative' and the content to be 'clear and concise'. The speakers were described as 'knowledgeable in their subject areas'. All attendees found the webinar to be a good use of their time.

### 6.3 Satisfaction among policymakers

All 15 stakeholders interviewed post-dissemination of the dialogue report said that they were very satisfied with the outcomes of the project.

<b>Environment Agency stakeholders</b>	<b>Other stakeholders</b>
'Fantastic project, eye-opening, it's been great' (Environment Agency Oversight Group member)	'It's been really good. Already useful and in the future will change culture for both flood risk agencies and communities' (NGO, Oversight Group member)
'The quality of insight – and so well articulated – by the public has been a surprise' (Environment Agency)	'Valuable for the public' (local authority)
'The extent of the interest and impact has been surprising – and nice' (Environment Agency)	'Necessary, useful, exceptionally well run project' (central government, Oversight Group member)
'Whole project managed very well'	'Successful, ambitious, enduring' (central government Oversight Group member)
'Really well-run'	'Will be respected and the results should be widely used' (central government, Oversight Group member)
'Well facilitated'	Hats off to the team, I really think they did a fantastic job' (central government, oversight group member)

# 7 Governance

This section addresses how successful the governance of the project has been, including the role of the Oversight Group and its representativeness, effectiveness and efficiency.

## 7.1 Representativeness

The Oversight Group had a wide membership and represented different points of view – frontline agencies, central government, non-governmental organisations (NGOs) and academics – across the breadth of organisations involved and interested in flood risk communication.

Given the important role of local authorities in flood risk communication, their role was perhaps slightly under-represented, although one local authority representative was involved from the earliest stages in shaping the invitation to tender (ITT) and interviewing shortlisted delivery contractors.

Since this is not a contentious area NGOs were involved (National Flood Forum and Red Cross) as potential users of the project findings rather than to balance out other views. Membership was fluid over the course of the project. There was little consistency in the individuals attending from Public Health England, the Cabinet Office, Defra, DCLG, the Welsh Government or Natural Resources Wales. Indeed nine out of the 18 original members were no longer involved and had been substituted by colleagues by the end. This could have been a constraint to project success. It was certainly time-consuming for the Environment Agency project manager and delivery team to maintain momentum and keep senior people involved. However, efforts paid off and ultimately the membership was at a sufficiently senior level to act as good conduits for taking project messages into their organisations (see Section 8).

## 7.2 Effectiveness of meetings

Oversight Group meetings changed in nature over the course of the project from conventional chaired meetings during the scoping stages to independently facilitated interactive workshops to plan the reconvened event and action plan during meetings 3 and 4.

The Oversight Group meetings observed were functional and efficient. Participants also found them efficient and effective ('all engaging and slightly different'); the last two meetings were seen as particularly engaging and a good catalyst for getting the necessary agencies round the table to talk and commit to implementing a joint Action Plan. One participant noted 'it might have been good to be a little clearer on expectations of the Oversight Group earlier on'.

Oversight Group members provided a strong steer to the project with academics inputting social research and risk communication perspectives from the outset, but less involved in the later stages. All Oversight Group members interviewed felt that their opinions had been listened to and reflected in the project.

Facilitators were aware of high turnover among Oversight Group members and structured later meetings to allow attendees to identify priority areas through their own prioritisation process. This approach was successful in creating a strong sense of ownership and buy-in

to final outcomes among participants, including senior Environment Agency and Met Office staff.

## 7.3 Efficiency

Most Oversight Group members did not attend all meetings. Average inputs were 2–3 days, plus report reading plus travel expenses to London and Bristol. The chair also spent about four days on championing the project. Very few Oversight Group members attended dialogue events or completed pre-meeting tasks of prioritising the potential actions emerging from the interim and final reports. While this meant a lot of familiar ground had to be recovered, it also sensitised the delivery team to the degree of culture change that would be required for the project to achieve lasting impacts.

A good balance was achieved between establishing sound relationships and the number of meetings. All stakeholders were happy to commit to one additional meeting.

All Oversight Group members interviewed felt that their personal and organisation time inputs had been more than commensurate with the value they expected from the project. The time commitment and enthusiasm of the Environment Agency project manager in coordinating organisations and disseminating findings throughout the project and bringing all organisations back together for the final meeting (including individual meetings with those that could not attend) was singled out for high praise by many interviews.

The seniority and championing role taken on by the chair were also recognised as vital to project success:

‘Without such an active Chair, the project just wouldn’t have had the same impact’.

## 7.4 Lessons learnt

- Maintaining momentum for a large Oversight Group over such a long project takes a great deal of management time and energy, but when done well can deliver a strong finish and project legacy.
- Continuity and quality of chairing has been critical to the success and credibility of the dialogue.
- The workshop approach of later meetings helped to create a sense of ownership among Oversight Group members.
- Continuous dissemination of results through emails, blogs and presentations within participating organisations and a flexible approach to how meetings were structured helped maintain interest and ensure ownership of the end results.



# 8 Impact

This section focuses on the difference or impact that the dialogue has made or could make in the future and the importance of timing, the core messages emerging and how these will be used by the commissioning body and wider stakeholders.

## 8.1 Timing

The project took longer than initially planned due to:

- a slow procurement process
- unforeseen events during the scoping stage – severe flooding of winter 2013 to 2014
- knock on impacts of these floods during the delivery phase

The extent of the floods in the winter of 2013 to 2014 made it difficult to get key providers together for a workshop.

The floods also had knock-on effects in the choice of locations. It required more discussion with the Oversight Group and wider stakeholders to find locations which had recent – but not still raw – experience of flooding. The floods also caused general nervousness among local staff – particularly in Wales – about hosting meetings which might be hostile. The inclusion of a Welsh location led to a long gap over the summer between the first four dialogues (May to July) and the last (mid-September).

The project therefore finished at least three months later than expected, taking the final reports into the election period. However, the policy stakeholders interviewed agreed that time slippage had not reduced the project's impact. On the contrary, new opportunities to influence policy and processes arose partly as a result of the floods. It was also suggested that a later publication date for the action plan may tap into new energy in the post-election period to take on interesting new ideas.

## 8.2 Shared core message

Emerging findings have been shared through a number of routes including:

- the project website – according to Google Analytics, this was visited 818 times by 723 users between August 2014 and March 2015 with 3,848 pages viewed
- regular emails to the Oversight Group and experts involved in the workshops by the Environment Agency project manager
- some 14 papers and presentations by the Environment Agency core project staff to internal and external audiences between June 2014 and March 2015 (see Annex D), with more planned

Interviews with policy stakeholders highlighted the many different intended applications around a largely shared understanding of core messages (see box below), which appears quite consistent across partners. Many of these messages chimed well with central government (Welsh Government, Defra, DCLG and Cabinet Office) and were not surprising to practitioners involved directly with communities (Natural Resources Wales, Environment Agency regional staff, Flood Forecasting Centre). But all agreed the project had provided strong and reliable evidence which can be taken into account in numerous policy processes

and systems. Organisations without substantial research budgets of their own in this area (Cabinet Office, Public Health England, Flood Forecasting Centre, DCLG) were particularly appreciative of these findings.

#### **Core messages**

- Don't talk about risks – and particularly probabilities and return events. Focus on impacts and actions – like the Fire Service does.
- Maps are not always helpful.
- There are differences in the journey of the 'flood literate' and 'flood unaware',
- Once size does not fit all – proliferation of different routes for conveying core messages will be needed but all should keep the language simple, clear and precise
- The public remains very confused about who does what – both in an emergency and in 'peace time'.
- And has limited awareness of Floodline or an individual's responsibilities to protect their property.
- But an increase in understanding can lead to individual action.
- Peer to peer and trusted individuals are important in getting messages across.
- First-hand experiences are very powerful.

### **8.3 Impacts on policies and processes**

The project has already started to impact on Environment Agency mapping and flood information systems. By November 2014 (the time of the reconvened workshop in Birmingham), the Environment Agency had taken on board many of the project messages and specific findings in mock-ups of flood risk maps and communication materials (fliers, personal flood plans and so on). Participant feedback on the maps is already starting to be applied to mapping at a national level. A meeting of four key communications teams with Environment Agency in March 2015 identified immediate actions and the need to develop a core narrative for communications with the press and others.

Table 8.1 summarises actual and planned impacts of the project on policies and processes identified by 15 stakeholders interviewed. This encompasses a huge range of potential impacts from the very tangible for directly public-facing flood risk communication roles (Environment Agency, Natural Resources Wales, National Flood Forum) to more indirect impacts for those whose main role is to influence other agencies (such as Cabinet Office, Defra, DCLG, the Welsh Government, Flood Forecasting Centre). These stakeholders reported they will be pushing core messages through their communications to others, such as local authorities, flood forums and emergency service providers, who communicate directly with the public.

<b>Environment Agency stakeholder views on Impacts</b>	<b>Views of other stakeholders</b>
<p>‘A real eye-opener using a dialogue. Answers from the public have been challenging [for the Environment Agency] but very useful’.</p> <p>‘So many constructive ideas that it will be hard for Environment Agency to follow up on everything’.</p> <p>‘Impacts will be maximised if executive director support is secured’.</p> <p>‘May need more ear-marked resources within Environment Agency for implementing findings to overcome institutional inertia’.</p>	<p>‘Findings endorse our thinking on a common sense approach to communicating risk’ (central government)</p> <p>‘Amazing shift in awareness of flood risk as well as lessons we learned’</p>

The dialogues also appear to have had a significant impact on participants. Of the 28 participants at the reconvened workshop almost all reported in round table discussions that the previous events had changed their thinking. In many cases it had also prompted action such as the examples below.

<b>Examples of impacts on the public participants</b>	
<p>‘We’ve managed to get a flood committee for our mobile home site’ (Oxford)</p> <p>Since the last workshop I’ve been to Town Hall meetings to make vulnerable older people aware’ (Leicester)</p> <p>I didn’t know anything about flood risk set up before (Leicester)</p> <p>‘Managed to re-insure for flood risk at £900 than my previous policy’ (Oxford victim of 2007 flood)</p>	<p>‘Have been trying to spread the word through [Asian] community functions’ (Leicester)</p> <p>‘Helped in the local primary school to do a local Flood Action Plan (York)</p> <p>Discussions with individual older people’ (hairdresser, York)</p> <p>‘Signed up to Floodline’ (five locations)</p>

<b>Lessons learnt</b>
<ul style="list-style-type: none"> <li>• The number of organisations involved in the flood risk landscape has been an administrative challenge but a positive contributor to the potential impact of the project.</li> <li>• Early dissemination of results by the project manager has maintained high level of interest and a gathering momentum (‘created a beast that everyone knows about’).</li> <li>• The slippage in timing has not had adverse effects. Where the policy target is not timesensitive, it is worth taking the time to get it right.</li> </ul>

**Table 8.1 Actual and planned impacts of the dialogue process on policies and processes**

<b>Organisation</b>	<b>Policy or process impacted</b>	<b>Example of how findings will impact</b>
Environment Agency	Flood maps on the internet	<ul style="list-style-type: none"> <li>Amended flood maps based on dialogue findings will be rolled out nationally and include different colours, static and dynamic risks, and different types of flooding. They will also be available by postcode and include key landmarks and flood prevention infrastructure, historic flooding and links to actions and PLP.</li> <li>Scenarios and findings on flood warnings feeding into a new Flood Warning System</li> <li>Providing evidence to the Government Digital Service on user needs and supporting the case for how information is included on GOV.UK or Defra/ Environment Agency/ Civil Contingencies Secretariat websites</li> </ul>
	Floodline redesign	
	FCERM	
	Joint Committee Environment Agency/ Met Office	
Environment Agency	Future Flood Warning Service	<ul style="list-style-type: none"> <li>Developing a core narrative based on project findings for communication to press, emergency responders, local authorities and the public.</li> <li>Seminar for colleagues on key findings and quick wins for integrating them locally immediately</li> </ul>
	Flood Awareness campaign materials	
	Four national teams	
Defra, Flood Team and Joint Environment Agency Research Programme	Regional offices (for example, Yorkshire)	<ul style="list-style-type: none"> <li>An opportunity to review roles and responsibilities and how they are communicated to the public</li> <li>15+ colleagues attended a lunchtime seminar to hear and discuss findings</li> <li>Communities and vulnerable people – work with DCLG to share findings on landlords (social, private, universities) and how to promote good practice</li> <li>Review on role of local authorities in the light of findings about public confusion over roles and responsibilities</li> <li>User experience-based holistic review of GOV.UK content and its organisation and links to other sources such as local authorities</li> <li>A best practice guide for flood risk communication for local authorities and a capacity building workshop for local authorities</li> </ul>
	FCERM strategy (2011) refresh 2016	
	Flood and Water Management Act 2010	
	Defra/local authority Local Capacity Building Programme	

Organisation	Policy or process impacted	Example of how findings will impact
	Defra Joint Research Programme (2015 to 2016)	<ul style="list-style-type: none"> <li>Flood risk data – inform the specification for a project on policy implications of moving to property-level mapping and for making better use of local authority asset register data</li> <li>Weather and flood warnings – explore taking forward recommended changes to flood warnings through control trials to provide empirical data about what works</li> </ul>
	Insurance	<ul style="list-style-type: none"> <li>Share findings with ABI and FloodRe (for example, on content and format for letters accompanying policy renewals)</li> </ul>
	Property level protection (PLP)	<ul style="list-style-type: none"> <li>Use BRE model house to demonstrate impacts of flooding and ‘open house’ events to showcase AXA/BRE database on houses which have invested in PLP measures</li> <li>Recent research to develop a competency framework for flood risk surveyors and suggest pathways for accreditation (linked to National Flood Forum)</li> </ul>
Cabinet Office, community resilience team	Civil contingencies risk communication	<ul style="list-style-type: none"> <li>Two-page summary on findings for colleagues working on civil contingencies, natural hazards, pandemic flu and so on</li> <li>Guidance for local authorities and local resilience forums for communication with the public</li> </ul>
Natural Resources Wales	Coastal (Flooding) Review Recommendations to Ministers and Delivery Plan	<ul style="list-style-type: none"> <li>Early findings on roles and responsibilities influenced recommendations</li> </ul>
	Flood Awareness Programme	<ul style="list-style-type: none"> <li>Findings will feed into delivery programme (2015 to 2016) and communications tools during March 2015</li> </ul>
	Other	<ul style="list-style-type: none"> <li>Findings shared with other teams (sustainable communities, planning, climate change)</li> <li>Findings shared with 22 Welsh local authorities through Local Government Association presentation</li> <li>Explore potential for using dialogue format working with National Flood Forum in flood risk communities</li> </ul>
Welsh Government, Flood	Community Plans	<ul style="list-style-type: none"> <li>Review of plans for consolidated maps (river, coastal and surface water flooding) to include a layer by postcode/text and focus on impacts and actions</li> </ul>

<b>Organisation</b>	<b>Policy or process impacted</b>	<b>Example of how findings will impact</b>
and Coastal team		rather than return periods and probabilities
Public Health England, flood, heatwaves and extreme weather team	Suite of new information for different issues and target grounds	<ul style="list-style-type: none"> <li>• Reviewing flood materials and reassessing content</li> <li>• Developing a new leaflet on sewage that provides reassurance (based on project finding that public is very concerned about foul flooding)</li> <li>• Creating a new mental health impacts leaflet</li> <li>• Starting to create videos on impacts and actions</li> </ul>
DCLG	Embedding results across community resilience work	<ul style="list-style-type: none"> <li>• Discuss the results with emergency responder user groups</li> <li>• Working with Defra to implement their post-dialogue action plans</li> <li>• Consider how local authorities can use the information</li> </ul>
National Flood Forum	Website refresh	<ul style="list-style-type: none"> <li>• Potential to use project written materials, videos, scenarios, Flood Action Plans and so on as material for website with focus on impacts, actions and recovery including insurance, community flood plans and PLP</li> </ul>
Academics	Communication of risk	<ul style="list-style-type: none"> <li>• Lessons learnt for communication of other types of risk – for example, using graphic, images and language and not statistical probabilities</li> </ul>

# 9 Costs and benefits

This section explores the overall balance overall of costs and benefits of the dialogue. The costs are relatively easy to quantify but the benefits are much harder. This is partly because the policy benefits identified may change the way things are done but not affect the cost of service delivery. Also as, noted in Section 8, many impacts will not materialise until several months down the track.

## 9.1 Costs

The full cost of the project was £280,000. This was divided between £140,000 from BIS and Sciencewise–Expert Resource Centre and £140,000 from the Joint Environment Agency/ Defra/ Natural Resources Wales Flood and Coastal Erosion Risk Management Research and Development Programme (of which £60,000 was provided in-kind as staff time). Estimated total costs are given in Table 9.1.

### 9.1.1 Contract costs

In the business case, £220,000 was earmarked for dialogue delivery and evaluation. A member of the Oversight Group was also paid for three days' input in shaping the ITT and interviewing shortlisted candidate contractors. The tender documents suggested a budget for both elements of around £192,000. The competitive tendering process led to winning tenders coming in at 10% below this price.

Subsequent budget variations to address changes in scope increased the final contract costs to £192,000 to cover additional costs of recruiting participants (upping over-recruitment to six per meeting to allow for potential dropout) and additional project management time (for two additional planning and Oversight Group meetings) and additional event observations. Unit costs for over 1,000 contact hours with 90 participants are estimated at £172 per participant contact hour.

### 9.1.2 Environment Agency in-kind contribution

Over the 18 months of the project, it is estimated that Environment Agency staff have put in effort of nearly one full-time equivalent (FTE) person year. The Environment Agency project manager officially spent 160 days, but in reality closer to 180 days, on the project. Her most important tasks were:

- running the pilot project in Newcastle
- procurement
- convening the Oversight Group
- coordinating local staff and wider stakeholder inputs
- preparing locally tailored stimulus materials

She also ran an extensive programme of dissemination on project progress and findings.

**Table 9.1 Estimated project costs including contracts and in-kind contributions**

Element of project	Value, £'000
Delivery contract	175,000
Evaluation contract	17,000
Tender review panel costs	1,300
EA in-kind contribution	110,000
Other In-kind contribution	42,500
Estimated travel costs	5,000
<b>Total time and expenses for the project</b>	<b>360,800</b>

**Notes:**

October 2013 to February 2015  
The tender review panel included 3 days of Oversight Group member involvement shaping the tender and interviewing delivery contractors  
Estimated hours and average day rate of £500 per day and an 8 hour day.

In addition to time spent leading the Oversight Group, the Environment Agency chair spent four days in championing the project and disseminating messages. Other core management team staff spent at least 20 days at events and preparing mock-up materials. Local experts also spent 10–20 days in attending and preparing materials.

### 9.1.3 Other in-kind costs

Other inputs are estimated at about 60 person days of non-Environment Agency senior stakeholder time attending Oversight Group meetings and reading and commenting on reports, 25 days of other expert time in Key Provider, public dialogues and the reconvened event workshops. Based on an average value of £500/person day the costs of this total of 85 days of non-Environment Agency in-kind contributions is equivalent to about £42,500. Sciencewise support costs (not included in the project costs shown in Table 9.1 above) are estimated to be £29,000. Travel costs are estimated on the basis of average train fares for attending meetings in London, Bristol, Birmingham and the five dialogue locations. All stakeholders interviewed (15) felt that the process represented Value for Money for their own organisations.

## 9.2 Benefits and value

Section 8 identified a wide range of actual and intended policy impacts from the dialogue process which will widen the routes and form of communication around flooding. No attempt has been made to quantify or monetise these impacts since none were reported as likely to directly reduce costs of delivery for the agencies involved.

A key message from the dialogue was the need for a shift in communications from risk to informing the public about actions they can take to protect themselves. In the longer term, policy impacts should feed through into damage costs avoided from future floods. Project impacts could be monitored through:



- increased numbers of households signed up to Floodline or other flood warning apps
- increased traffic to key provider web pages (Environment Agency, Natural Resources Wales, National Flood Forum) on preventative action and flood insurance
- increased sales of PLP equipment

However, it will still be difficult to attribute benefits in terms of reduced damage costs from future flooding directly to these policies initiatives.

Nearly one in every six properties in England is at risk of flooding. The average damage of a flood to a home has been estimated at £30,000 (based on the 2007 floods) including the costs of reinstatement and accommodation for those that are displaced. Those affected may also suffer stress and trauma when their belongings are ruined. The average costs from the 2013 to 2014 winter floods in places like Somerset are likely to have been even higher because of the length of floods, but have not yet been calculated.

It would only require 12 households (that is, 13% of those involved in dialogues, all of whom live in high flood risk areas) to take preventative action (for example, signing up to Floodline, fitting PLP measures such as air brick, toilet valves or flood skirts, and moving their possessions upstairs in the event of a flood) to avoid flood damage in a major flood event to recoup project costs. While the evaluation was not able to collect robust quantitative data on actions taken, anecdotal evidence from participants suggests that at least this percentage had the intention of taking action individually or collectively. However, such benefits will not be tested until the time of a major flood in their area.

#### **Lessons learnt**

- The budget was appropriate for the scale and number of events to meet project objectives.
- The time and resources committed by the Environment Agency core management team were significant but a major contributor to the success of the project.
- The project has offered value for money. All stakeholders interviewed (15) post dissemination felt that the project provided greater value for money to their organisations than the time and direct costs they had invested.
- In hindsight the results may have been achievable with only 4 round 1 meetings (compared to the 5 that were carried out) but this would not have significantly reduced project costs.

# 10 Credibility

This section explores the robustness of the process and in particular whether the dialogue process was seen by Oversight Group members as suitable and sufficiently credible for them to use the results with confidence.

## 10.1 Robust methodology

Most stakeholder organisations interviewed already have some experience of mixed qualitative and quantitative methods. Some – such as Cabinet Office and Public Health England – have been involved in other Sciencewise projects. All those interviewed felt that the dialogue approach of this project would be considered as robust and valid within their organisations.

All stakeholders interviewed felt that a more traditional social research method – quantitative surveys or smaller focus groups – would not have provided the richness of material or nuanced insights of this project. The Environment Agency and Defra noted that these research approaches have been tried before and not prompted the necessary change.

Many of the stakeholders felt that the key messages and findings from the research were not necessarily new or surprising, but did provide very useful reinforcement of messages received from smaller community consultations or discussions with representative organisations. Other approaches would not have carried the necessary weight to make a real impact.

### **Views of the robustness of the process from Oversight Group members**

‘Very good example of independently facilitated open dialogue and co-production’

‘Value has been in scale and representation’

‘Good project to be associated with’

‘Very useful project, very happy to have been involved’

Many organisations particularly valued the opportunity to hear first-hand from the ‘flood unaware’ group rather than through representative organisations or academics. They also valued the chance to talk to the ‘flood literate’ outside of the charged atmosphere after a flooding crisis.

The opportunity to feedback to a subset of participants (28) at the reconvened workshop was seen as an important component of the methodology. The structure of this event and the considerable work by the Environment Agency team members demonstrated how participants’ inputs had already fed into a rethink of communications (maps, videos, posters and fliers, letters from insurers, flood plans and so on). A central government attendee remarked:

‘I really enjoyed the reconvened event – a good mix of participants and topics and it felt very constructive and it really felt as though people had been listened to’.

## 10.2 Credibility of public dialogue to participants

Participants also found the process credible.

By the end of Day 2, participants were almost unanimously convinced of the value of public participation (99%, one unsure) while most (95%) thought they were more likely to get involved in such events again in the future. A few (5%) were not sure they would get involved, suggesting that their interest had mainly been on the basis of an interest in flood issues.

The majority of participants were optimistic that the events would inform the way flood risk agencies communicate with the public about floods ('as long as it is followed up well'). Overall, three-quarters (76%, 68 out of 89) were happy to be re-contacted by the project team, while 56% (50 out of 89) would be happy to be contacted by Sciencewise about similar events in the future. A similar number were interested in attending the reconvened workshop in Birmingham and many of those that attended would be happy to be involved in flood risk events in the future.

### 10.2.1 Lessons learnt

The perceived value added and credibility of this process from policymakers' point of view centred on the following aspects.

- The relatively large sample size (90) used.
- The length and structure of Round 1 dialogues (10 hours per location) provided an opportunity for in-depth engagement and the chance to probe behind statements and feelings.
- The well-disciplined management of the methodology using the three different scenarios and character journeys through different levels of knowledge and from static to active flood risks which produced comparable data across locations.
- The composition of the groups was good with a mix of age, gender, ethnic and language groups, all socioeconomic segments, types of flood risk faced, and most importantly of the 'flood literate' and 'flood unaware' in high risk zones.
- Including a Welsh location was felt useful to inform Welsh policy processes.
- The opportunity for practitioners to attend events (though few Oversight Group members attended).
- The opportunity via the video for Oversight Group members to view the learning journey of participants.
- The Sciencewise brand and methodology was cited as adding credibility by the Environment Agency and Cabinet Office.
- The involvement and endorsement of the Cabinet Office increased interest and gave greater weight to the findings for other agencies.
- The Oversight Group was a key factor in building confidence in the robustness and objectivity of the process.

The credibility of the process from the point of view of participants was enhanced by:

- the number and attitudes of experts who turned up on a Saturday or week day evening (and in a number of cases followed up on local community flood planning issues afterwards)

- the effort the team put into getting questions answered between the Day 1 and Day 2 sessions
- the changes made reflecting public input to materials for the reconvened workshop
- the professionalism of the website which provided a central point of reference for participants

<b>Expert views on the public dialogue process</b>	<b>And the credibility of resulting information</b>
<p>‘Made me more enthusiastic’</p> <p>‘Increased confidence in using such events in the future’</p> <p>‘Surprised by just how productive it was.’</p> <p>‘Confirmed that it’s very worthwhile’</p> <p>‘Haven’t changed [my views]: I always knew this was the best way to get concentrated consultation’.</p> <p>‘Very positive – needs to be public engagement early, like this, not just user testing of proposed products’</p> <p>‘It’s super important. The innocent eye can see so much their technical brains are blind to’.</p> <p>‘I think it was good to engage in this level of detail and to pay participants and hold the event at the weekend gets to a different demographic’</p>	<p>‘The event really reinforced the essential need to engage with the public. We could produce the best technical and scientific information on flood risk but if the public don’t understand it and then don’t take appropriate action then we are no further forward’.</p> <p>‘I think we have under-estimated levels of understanding and the willingness to engage’.</p> <p>‘Excellent ideas and contributions from unexpected quarters. Never underestimate people!’</p>

# 11 Lessons for the future

The most important lessons for the future on what worked well and less well include the following.

1. Setting up an oversight group to apply for the Sciencewise funding and then win it gave the group time to cohere and think through objectives and ideal outcomes as well as key questions they had for the public before the facilitators were hired to design the process. Winning the money from Sciencewise and hiring the project deliverers meant they felt very in control of the process.
2. A realistic extended scoping period – for the literature review and key providers workshop – paid off in imaginative design and a variety of engaging stimulus materials which enabled real engagement.
3. The inclusion of consultants with real experience of the topic and working with the commissioners as a core part of the delivery team was reflected in the quality of the literature review and the shaping of dialogue design and in getting the delivery team up to speed.
4. A larger scale and spread of locations and audiences (for example, ‘flood literate’ and ‘flood unaware’) allowed policymakers to feel they had consulted with the public at large and particularly with the segment that they find hardest to reach.
5. Sampling with very specific requirements (postcodes and experience) or in locations unfamiliar to the market researchers takes longer and needs to be reflected in project planning.
6. Unforeseen slippage in the project timeframe need not negatively affect the impacts of the project where policy objectives are not time sensitive. The delay is worth it to get the right locations, experts, public and materials.
7. Experienced facilitators can safely manage sensitivities in dialogues around real events where participants have suffered direct impacts in the past.
8. High staffing ratios to participants (1: 3–4) helped to capture very rich and comparable data from each event.
9. Time spent in getting the active involvement of local experts in the dialogue events can really increase the credibility of the process for participants and for policy makers.
10. A reconvened event where the inputs of previous stages have already been applied is really useful in demonstrating the importance of their role in the policy process to the public. This interest could be harnessed in the longer term by reconvening groups of well-informed information users for different purposes.
11. A large Oversight Group over a long project can pose real challenges in terms of management, coordination and maintaining continuity. But can also lead to wider project impacts if the right individuals can take the messages back into their own organisations.
12. A project website for sharing information and disseminating findings can contribute to openness, transparency and the credibility of the process.

# 12 Conclusions

Overall, this dialogue was a great success. The reworked objectives were clear and well timed in relation to policy and process opportunities, which had evolved since the pilot stage. There were impressive efforts to involve the large number of organisations responsible for and interested in flood risk through a large Oversight Group.

The scope and framing of the project reflected a well-resourced scoping stage. This involved a comprehensive literature review and successful stakeholder elicitation event whose findings were reflected in a creative workshop design built around scenarios and 'characters' which took the public from low flood risk awareness through a real understanding of the impacts and willingness to take action.

The budget for the project was appropriate for the scale, location and number of events (90 people over five locations for 10 hours initially with 28 of these attending a reconvened workshop of four hours) to meet project objectives. Ultimately similar results could probably have been achieved with only four Round 1 meetings. Covering all the different types of flood risk turned out to be less important than a good mix of 'flood literate' and 'flood unaware' participants.

Round 1 and Round 2 public dialogues took place within an open, warm and lively atmosphere. The facilitation team was highly competent and all participants felt comfortable and contributed actively, resulting in a richness of data and insights. Levels of satisfaction among participants, experts and Oversight Group members was very high. Policymakers particularly appreciated hearing from hard to reach demographics such as:

- socioeconomic segment DE
- those with no prior flood experience
- (through group role play) the isolated elderly and students

The broad Sciencewise approach to public dialogue and the way in which 3KQ designed and delivered it was seen as robust. The richness of data could not have been generated by traditional quantitative surveys or focus groups. The reconvened event and website lent credibility from the public's point of view. The Sciencewise brand, the scale of engagement and seeing the participant's journey (via the video) gave extra credibility for central government policymakers.

Three of four objectives were met fully. The objective of getting all organisations involved in flood risk communication to take a consistent approach could not have been fully achieved within the timeframe of a dialogue project. However, organisations are now willing and enabled to do so.

The Environment Agency project team has already carried out many dissemination activities within the Environment Agency or with other government departments, NGOs and corresponding government agencies elsewhere (for example, Flanders and the Netherlands).

Dialogue findings and key messages have already been applied to some Environment Agency processes and in wider stakeholder policies and documents. Many other applications have been identified and should be applied during the rest of 2015. The Oversight Group plans to reconvene and review progress at the end of 2015. That will be the point at which to judge whether anticipated impacts have been delivered.

# Annex A: Members of project governance and oversight group, and interviewees post-dissemination of the final report

Project governance	Organisation and position
*John Curtin	Environment Agency, Project Sponsor and Oversight Group Chair
*Mike Steel	Environment Agency, Senior Business User
Alison Crowther	Sciencewise Dialogue and Engagement Specialist
*Jacqui Cotton	Environment Agency, Project Manager
<b>Oversight Group</b>	
Paul Wyse	Environment Agency
*Bridget Beer	
*Graham Lindsey	
Karen Hetherington	
Cath Brooks	
Theresa Rooke	
Derrick Ryall	Met Office
Sandra Cotterill	
Ian Hoult	Hampshire CC
Alison McNulty	Red Cross
*Angie Bone	Public Health England
Owen Landeg	
Carla Stanke	
*D Spiegelhalter	Stats Lab, Cambridge University
*James Morris	Welsh Government
David Thomas	
Juliet Aharoni	BIS
K Beven	Lancaster University
*Mary Stevens	Defra
Maureen Fordham	Northumbria University

<b>Project governance</b>	<b>Organisation and position</b>
*Paul Cobbing Ruth Webb	National Flood Forum
*Rachel Roberts *Rebecca Bowers	Cabinet Office
*Rob Garnham	Local authority councillor
Tim Godson Kate Head	DCLG
Andrew Wall Ceryl Hughes *Amanda Paton	Natural Resources Wales

\*Interviewed post dissemination of the final report



# Annex B: Evaluation of Round 1 public dialogue workshops

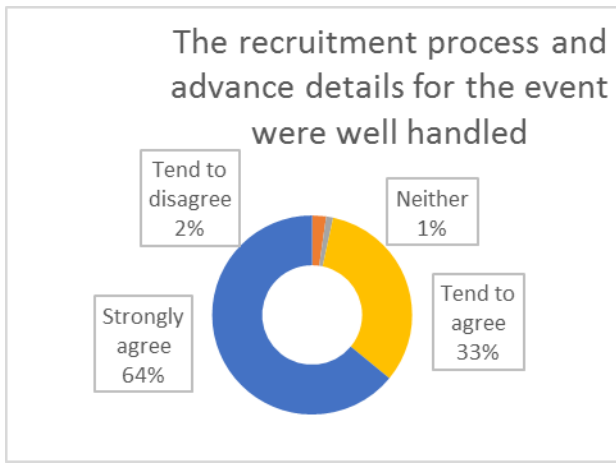
A total of 89 participants in five locations: Leicester (22), Oxford (16), York (22), Skegness (12), Newtown (17)

Two day events – three hours on a weekday evening followed by six hours on a Saturday Recruitment incentive of £120 per person paid in two instalments.

All 89 participants completed evaluation questionnaires.

28 people attended the reconvened workshop in Birmingham

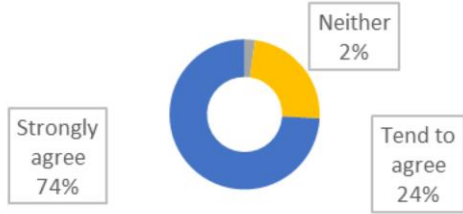
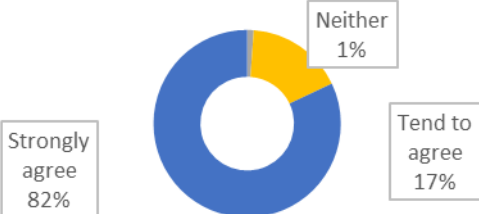
Facilitator team: one lead facilitator, two table facilitators and three rapporteurs per session Experts: 27 (4–6 per location) completed evaluation questionnaires.



Overall 97% of participants agreed that the recruitment process had been well-handled. The incentive payment process worked smoothly in all locations.

Overall there was a good enough mix of people from the five locations to provide a representative sample of age, gender, ethnic background, socioeconomic factors, community activism and experience of flooding. The aim was for 18 participants in each location with over recruitment (24) to allow for dropout. Higher than expected numbers (22 each) in both Leicester and York offset lower than hoped for numbers in Skegness (12). In Oxford there was a slight over representation of older people, while in Skegness there was over representation of lower socioeconomic groups. BAME representation was appropriate to all five locations. The choice of locations (two which have experienced flooding since 2007) and door-to-door recruitment against flood maps ensured a good mix of flood experiences.

Recruiters reported difficulties recruiting against quotas on the basis of flood risk maps in some areas for a number of reasons including recent experiences of flooding and unwillingness to talk about it (Henley in Oxfordshire) and the limited number of residential buildings in high risk zones. Recruitment was difficult in Skegness because this is not a regular market research location, and the recruitment and the timing was difficult for those

	<p>involved in the B+B trade. Given sufficient warning the delivery team could have been flexible in the start time for this meeting to ensure a larger turnout. The recruitment incentive was the same in all areas, but may have been considered of relatively lower value in Oxford and York than in Skegness and Newtown due to socioeconomic factors.</p>										
<p>I am aware of and understand the purpose of the two workshops</p>  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Strongly agree</td> <td>74%</td> </tr> <tr> <td>Tend to agree</td> <td>24%</td> </tr> <tr> <td>Neither</td> <td>2%</td> </tr> <tr> <td>Disagree</td> <td>0%</td> </tr> </tbody> </table>	Response	Percentage	Strongly agree	74%	Tend to agree	24%	Neither	2%	Disagree	0%	<p>The objectives of the project, the dialogue and how the results would be used were clearly presented at the beginning of Day 1 and recap of Day 2, with adequate time for Q&amp;As. There was a good level of understanding of the purpose of the workshops among almost all participant (98%).</p> <p><b>12.1 Lesson:</b></p> <p>The team responded to feedback from the first set of workshops and produced a short brief explaining the remainder of the process and stressing opportunities to get involved or to view outputs on the website.</p>
Response	Percentage										
Strongly agree	74%										
Tend to agree	24%										
Neither	2%										
Disagree	0%										
<p>The information presented seemed fair and balanced</p>  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Strongly agree</td> <td>82%</td> </tr> <tr> <td>Tend to agree</td> <td>17%</td> </tr> <tr> <td>Neither</td> <td>1%</td> </tr> <tr> <td>Disagree</td> <td>0%</td> </tr> </tbody> </table>	Response	Percentage	Strongly agree	82%	Tend to agree	17%	Neither	1%	Disagree	0%	<p>The introductions to the Day 1 highlighted: the role of all agencies involved in flood communications; all stages of flood risk (static, alert and imminent threat); and different types of flooding. Flood risk maps and other materials on the history and risk of local flooding were collated by the project manager for each of the five locations. Presentations by the facilitator were backed up by handouts on Day 1. While the information presented was not really contentious, it was complex and new to most participants. A homework task to find out about more about flood risk in their own areas was completed by the vast majority of participants using the internet and Floodline.</p> <p>All respondents in all locations felt that they had received enough information and that it was a good balance between different techniques and styles of communication. The Environment Agency local flood risk maps (surface, river and tidal flooding) were understandable to many, but not all participants.</p> <p>Testing these maps and collecting participant suggestions for making them more useful was a primary purpose of the research. Other materials developed or collated specifically for the project were clear, accessible and provided a good stimulus for discussions.</p>
Response	Percentage										
Strongly agree	82%										
Tend to agree	17%										
Neither	1%										
Disagree	0%										

There was enough relevant information to enable me to contribute to the discussion



**Lessons:**

The project website and homework task (which for most involved using Environment Agency website, Floodline and flood alerts) reinforced information provided in the introductory session. A significant number of participants signed up to Floodline as a result.

Participants responded well to the variety of different communications methods and styles. Individual responses highlighted the important message that needs for ‘flood literate’ and ‘flood unaware’ and even between these groups are different.

Experts and participants were impressed by the efforts of the Environment Agency project manager to provide locally tailored information.

Participants were particularly impressed by the work to develop maps, flood plans and posters in response to their inputs between rounds of the dialogue.

The methodology relied heavily on three scenarios based on different ‘characters’ travelling on a journey from no awareness of static risk to high awareness of imminent risk through Day 2. This worked for both ‘flood literate’ and ‘flood unaware’ groups because it forced participants to think about other people as well as their own experience. Some experts felt that the ‘characters’ worked less well for those with previous flood experience, but there was flexibility to spend more time on the imminent risk scenarios of greatest interest to these individuals.

The video about the aftermath of flooding was hard-hitting and emotional for some people to watch, but resonated well with the majority and surprising experts that the public appear to have more appetite for hearing about the impacts – however shocking – and what they can than about static risks.

The live telephone call worked well and focused participant’s minds on the needs of the vulnerable (elderly, hard of hearing, English as a second language and so on) and those without access to the internet.

### I could ask questions easily and get appropriate answers



### I found the expert people helpful in answering questions

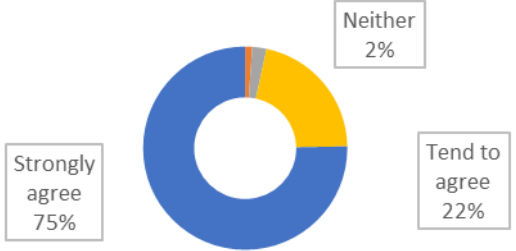



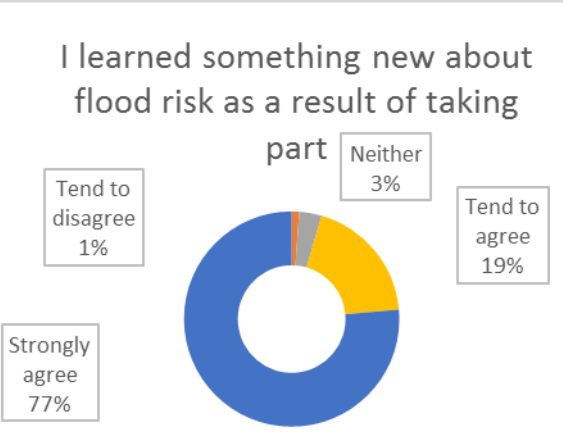
99% of participants felt that they could ask questions easily and get appropriate answers. All individuals contributed to table discussions and no-one appeared to dominate discussions. All participants (100%) found the experts present helpful in answering questions. At least one expert was available to each table on each day in each location. Experts were in listening mode and did not attempt to correct all comments, but answered questions when asked and used notepads to make useful observations. Expert inputs were appropriate and did not distract from public discussions. People were clear who was participating and who wasn't. A typical view was: 'So glad specialists attended'.



#### Lessons:

Numerous opportunities were timetabled into table discussions and plenary for asking questions. Having questions either answered in the room or collated and answered on Day 2 – with clear evidence of time invested by the project manager between sessions – worked well in getting questions answered and in generating confidence in the process.

The considerable time invested by the Environment Agency project manager in identifying local Environment Agency and local authority staff to attend each session and provide local materials really paid off. Participants found their inputs invaluable and, despite initial hesitancy in some cases (fear of exposure), experts reported that their participation had been really valuable and the findings either eye-opening or affirming what they knew anecdotally.

<p>I had enough time to discuss the issues</p>  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Strongly agree</td> <td>75%</td> </tr> <tr> <td>Tend to agree</td> <td>22%</td> </tr> <tr> <td>Neither</td> <td>2%</td> </tr> </tbody> </table>	Response	Percentage	Strongly agree	75%	Tend to agree	22%	Neither	2%	<p>Overall 97% of participants felt they had sufficient time to discuss issues. The only area where a few felt more time could have been spent was on flood maps on Day 1. The time spent on each issue and stage of the scenarios seemed balanced and timekeeping by the lead and table facilitators was good. Generally the timing worked well and timekeeping by the facilitators was excellent. Typical comments by participants included: 'Wasn't really looking forward to 6 hours today but time went quickly with good discussions'.</p> <p><b>Lessons:</b></p> <p>Good timekeeping – all sessions began and finished on time and none felt rushed.</p> <p>Minor changes in timing after the first location with a few sessions combined to avoid duplications and others allowed to run a little longer, giving the facilitators more scope for time spent on the issues of most importance for their group.</p> <p>Individual worksheets gave people the option to work individually if they preferred, but not too much time was spent on this and most participants preferred to work in pairs or groups.</p>
Response	Percentage								
Strongly agree	75%								
Tend to agree	22%								
Neither	2%								
<p>The facilitation was independent, professional and effective</p>  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Strongly agree</td> <td>89%</td> </tr> <tr> <td>Tend to agree</td> <td>11%</td> </tr> </tbody> </table>	Response	Percentage	Strongly agree	89%	Tend to agree	11%	<p>There was unanimous agreement that the facilitation was independent, professional and effective in all five locations. The boundary between running the process with technical issues deferred to experts was very clear. All participants were treated respectfully, given space to contribute, and no-one was allowed to dominate discussions. Inputs were captured systematically by table rapporteurs and experts on note pads. Typical comments included: 'Facilitated really well'</p> <p>'Excellent facilitator/facilitations'</p> <p>'The meeting was well chaired and coordinated by Richard'</p> <p>'Enjoyed participating. Helped me come to terms with my own 'ghosts''.</p> <p><b>Lessons:</b></p> <p>Flexibility and sensitivity. In Oxford and York almost two-thirds had direct experience of flooding. Facilitators redesigned the warm-up sessions accordingly and were alert to the impacts of stimulus materials on participants. In one case when a participant was clearly upset by their flood memories, this was dealt with very sensitively'.</p>		
Response	Percentage								
Strongly agree	89%								
Tend to agree	11%								

	<p>Staffing ratios – in each location a team of three facilitators and three rapporteurs recording and simultaneous transcribing each session ensured the quantity and richness of the information collected;</p> <p>Continuity – a pool of two lead facilitators and four table facilitators and that almost sessions were attended by the Environment Agency and contractor project managers ensured continuity, consistency of methodology and building on the learning from each session.</p>										
<p>I learned something new about flood risk as a result of taking part</p>  <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Strongly agree</td> <td>77%</td> </tr> <tr> <td>Tend to agree</td> <td>19%</td> </tr> <tr> <td>Neither</td> <td>3%</td> </tr> <tr> <td>Tend to disagree</td> <td>1%</td> </tr> </tbody> </table>	Response	Percentage	Strongly agree	77%	Tend to agree	19%	Neither	3%	Tend to disagree	1%	<p>96% of participants felt that they learnt something new about flooding. There were minor differences between the ‘flood unaware’ (Leicester, Skegness and Newtown) where this was overwhelmingly the case and the ‘flood literate’ audiences in Oxford and York where some individuals had recent personal experiences of flooding and felt they already knew quite a lot. The key things participants reported they had learnt were about the variety of different types and severity of floods, where risk information was available, how to sign up for Floodline and other sources of data, and how to take action to prepare for flooding and protect their property. Typical comments included:</p> <p>‘Excellent workshop, useful for information, well handled’</p> <p>‘Excellent two-day event, very informative and made me more aware about floods’</p> <p>‘I felt it was very useful and I learnt a lot about flooding’</p> <p>‘Fantastic session, really informative’</p> <p>‘The event was informative and allowed views to be aired’.</p> <p>‘I have learnt a lot and know what advice to give others and where to get more information myself. They are asking people how they can help everyone, which is good’</p> <p>‘Oddly enjoyable day, I learnt a lot’</p> <p>‘Fantastic learning curve’</p> <p>‘It was totally informative and now feel much more in touch with what to do in the event of future flooding’</p> <p>Evidence of this learning journey was also provided by an informal self-assessment by participants of their starting place on Day 1 and ending place on Day 2 in terms of their</p>
Response	Percentage										
Strongly agree	77%										
Tend to agree	19%										
Neither	3%										
Tend to disagree	1%										

	<p>knowledge of flood issues, where to get information and whose responsibility they felt it was to protect their property.</p> <p><b>Lessons:</b></p> <p>Debriefing on how and why participants had moved from their starting point was particularly useful in highlighting their initial lack of understanding of responsibilities and probing how understanding this made participants feel more able and willing to take preventative action.</p>												
<div data-bbox="203 470 815 879"> <p>I am more convinced of the value of public participation in these sorts of topics</p>  <table border="1"> <tr> <td>Strongly agree</td> <td>73%</td> </tr> <tr> <td>Tend to agree</td> <td>27%</td> </tr> </table> </div> <div data-bbox="203 895 815 1326"> <p>I am more likely to get involved in these kinds of events in future</p>  <table border="1"> <tr> <td>Strongly agree</td> <td>60%</td> </tr> <tr> <td>Tend to agree</td> <td>35%</td> </tr> <tr> <td>Don't Know</td> <td>4%</td> </tr> <tr> <td>Neither</td> <td>1%</td> </tr> </table> </div>	Strongly agree	73%	Tend to agree	27%	Strongly agree	60%	Tend to agree	35%	Don't Know	4%	Neither	1%	<p>By the end of Day 2, participants were unanimously convinced of the value of public participation while most (95%) thought they were more likely to get involved in such events again in the future. A few (5%) were not sure they would get involved, suggesting that their participation had mainly been on the basis of an interest in flood issues. The majority of participants were optimistic that the events would inform the way flood risk agencies communicate with the public about floods ('As long as it is followed up well').</p> <p>Overall, three-quarters (76%, 68 out of 89) were happy to be re-contacted by the project; 56% (50 out of 89) were happy to be contacted by Sciencewise about similar events in the future. A similar number were interested in attending the reconvened workshop in Birmingham and many of those that attended would be happy to be involved in flood risk events in the future.</p> <p><b>Lessons:</b></p> <p>The credibility of the process from the point of view of participants was increased by:</p> <ul style="list-style-type: none"> <li>• the number and attitudes of experts who turned up on a Saturday or week day evening (and in a number of cases followed up on local spatial or community flood planning issues afterwards)</li> <li>• the effort the team put into getting questions answered between Day 1 and 2 sessions</li> <li>• the changes made reflecting public input to materials for the reconvened workshop</li> </ul>
Strongly agree	73%												
Tend to agree	27%												
Strongly agree	60%												
Tend to agree	35%												
Don't Know	4%												
Neither	1%												

Overall I am satisfied with the two events I attended

Strongly agree  
90%



Tend to agree  
10%

Overall, there was unanimous satisfaction with the events with 90% strongly agreeing and 10% tending to agree. Not a single participant did not enjoy the workshops. Workshops were reported to have been a good experience, interesting, useful and very well run by both the public and expert participants. Both groups highlighted the value of bringing together people from different situations to widen their understanding and share personal experiences of flood.

Participant's comments were overwhelmingly positive and included:

'Excellent, thank you for letting me be a part of these 2 days, very interested for October event'.

'Very informative, interesting and was made to feel relaxed and comfortable. Was well organised time went quickly'.

'I felt my contribution was of value and interest to the experts'.

'I think people from different situations mixing in groups is important to widen the understanding of levels of effects on them'.

'The workshop was well presented'.

'A good experience and useful' Empowering!

'It's good to share public views'

'Professional campaign'

'Overall I found the whole thing educational and rewarding'.

'Extremely professional throughout'

'Enjoyed every moment. Thank you for the useful information'.

'Very pleased I participated'.








Logistics and sustainability	Venue accessibility – all five locations were easily accessible by public transport and walking and had disability access
	<p>Welcoming – participants were made to feel welcome, with clearly visible recycled name badges. Ample food and beverages including healthy and vegetarian options were provided in all locations.</p> <p>Rooms were prepared well in advance with the facilitation team travelling up the night before Saturday meetings. All presentations were visible and audible and technology (access to websites and telephone helplines) was checked in advance.</p>








# Annex C: Analysis of expert participant questionnaires

30 participants on Day 1 and 25 on Day 2													
26 questionnaires completed													
1	<p>The purpose of the event was made clear to participants</p> <div style="text-align: center;"> <p>1. The purpose of the event was made clear to participants</p> <table border="1"> <tr> <td>Don't Know</td> <td>11%</td> <td>Neither</td> <td>8%</td> </tr> <tr> <td>Strongly Agree</td> <td>46%</td> <td>Tend to agree</td> <td>35%</td> </tr> </table> </div>	Don't Know	11%	Neither	8%	Strongly Agree	46%	Tend to agree	35%				
Don't Know	11%	Neither	8%										
Strongly Agree	46%	Tend to agree	35%										
<p>Comments:</p> <p>'Good introduction on the first day'</p> <p>'It should have been stressed more often that we couldn't solve specifics'.</p> <p>'Encourage more 'wacky' ideas'.</p> <p>'I don't know what was sent to participants in advance'.</p> <p>'Clearly explained and brought back on track when it drifted'.</p>													
2	<p>The way the results of this event will be used was made clear</p> <div style="text-align: center;"> <p>2. The way the results of this event will be used was made clear</p> <table border="1"> <tr> <td>Don't Know</td> <td>23%</td> <td>Tend to disagree</td> <td>4%</td> </tr> <tr> <td>Strongly Agree</td> <td>15%</td> <td>Neither</td> <td>23%</td> </tr> <tr> <td></td> <td></td> <td>Tend to agree</td> <td>35%</td> </tr> </table> </div>	Don't Know	23%	Tend to disagree	4%	Strongly Agree	15%	Neither	23%			Tend to agree	35%
Don't Know	23%	Tend to disagree	4%										
Strongly Agree	15%	Neither	23%										
		Tend to agree	35%										
<p>Comments:</p> <p>'Not overly clear'</p> <p>'Could say more about other organisations not at the workshop'.</p> <p>'Don't know what was said in advance – not discussed in the workshop'.</p> <p>'Good briefing and docs for staff attending'</p>													

3	All the main issues were covered and the time spent on each was balanced	<p style="text-align: center;">3. All the main issues were covered and the time spent on each was balanced</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Strongly Agree 50%</div>  <div style="border: 1px solid gray; padding: 5px; text-align: center;">Tend to agree 50%</div> </div>
<p>Comments:</p> <p>‘Time was spent on answering users specific questions’.</p> <p>‘A little less time for could have been spent on the types of flooding presentation, as this group tended to be quite wise to the information they were hearing. This feedback has also been fed back to the workshop leads’. (York)</p>		
4	There was a good enough mix of people to get a diverse range of views	<p style="text-align: center;">4. There was a good enough mix of people to get a diverse range of views</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Strongly disagree 4%</div>  <div style="border: 1px solid gray; padding: 5px; text-align: center;">Tend to disagree 8%</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Strongly Agree 65%</div> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Tend to agree 23%</div> </div>
<p>Comments:</p> <p>‘Really good mix and all participants were able to express their views’.</p> <p>‘There was quite a strong group bias affected by river flooding’.</p> <p>‘Very good sample’</p> <p>‘Birstall area highly represented’ (Leicester)</p> <p>‘Very good mix with various levels of experience’</p> <p>‘There appeared to be a lack of representation from professional groups’. (Skegness)</p> <p>‘Greater number of people not affected by flooding may have aided some evaluation’.</p> <p>‘Obviously a lot of work had gone into getting a range a people ... but obviously older people have more time available to come to these events’.</p>		

5	Participants seemed able to understand and use information provided (maps, scenarios, handouts)	<p>5. Participants seemed able to understand and use information provided (maps,...</p>  <table border="1"> <tr> <td>Tend to disagree</td> <td>15%</td> </tr> <tr> <td>Strongly Agree</td> <td>38%</td> </tr> <tr> <td>Neither</td> <td>8%</td> </tr> <tr> <td>Tend to agree</td> <td>39%</td> </tr> </table>	Tend to disagree	15%	Strongly Agree	38%	Neither	8%	Tend to agree	39%
Tend to disagree	15%									
Strongly Agree	38%									
Neither	8%									
Tend to agree	39%									
<p>Comments:</p> <p>'Information was good and explanations provided were clear'.</p> <p>'I think more context on maps, how they are produced, limitations and so on would help'.</p> <p>'Could have used the flood warning system to send live messages – phone, SMS, email and so on – but that was the point to critique them'.</p> <p>'Where they didn't it's probably a failing of the underlying info. For example, Environment Agency website, not of the handout prep'.</p>										
6	There seemed to be enough information to enable participants to contribute fully	<p>6. There seemed to be enough information to enable participants to contribute fully</p>  <table border="1"> <tr> <td>Strongly Agree</td> <td>58%</td> </tr> <tr> <td>Tend to agree</td> <td>42%</td> </tr> </table>	Strongly Agree	58%	Tend to agree	42%				
Strongly Agree	58%									
Tend to agree	42%									
<p>Comments:</p> <p>'IT was sometimes a bit sticky and inaccessible'.</p> <p>'Could possibly provide one copy each of the support material'.</p>										
7	There was enough time overall to discuss the issues properly	<p>7. There was enough time overall to discuss the issues properly</p>  <table border="1"> <tr> <td>Strongly Agree</td> <td>77%</td> </tr> <tr> <td>Tend to disagree</td> <td>4%</td> </tr> <tr> <td>Tend to agree</td> <td>19%</td> </tr> </table>	Strongly Agree	77%	Tend to disagree	4%	Tend to agree	19%		
Strongly Agree	77%									
Tend to disagree	4%									
Tend to agree	19%									
<p>Comments:</p> <p>'Wouldn't want it to be any longer. Discussions got to the point in the time allowed'.</p> <p>'The area is too massive, we could about insurance all day'.</p> <p>'The day had a good pace, keeping things moving. Extracting the main points and</p>										

	<p>then moving on’.</p> <p>‘So much to cover – I think a whole weekend would be too long however’.</p> <p>‘Some of the issues are 'too big' to discuss in the short sessions - opportunities for follow up later?’</p> <p>‘As mentioned above a little less time on the presentation would have allowed more time for the discussion of issues with the participants’.</p>
8	<p>The facilitation was independent, professional and effective</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>8. The facilitation was independent, professional and effective</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px;">Strongly Agree 65%</div>  <div style="border: 1px solid gray; padding: 5px;">Tend to agree 35%</div> </div> </div>
	<p>Comments:</p> <p>‘Well briefed. Had a good fund of relevant questions when a topic was exhausted’.</p>
9	<p>All participants were treated equally and respectfully</p> <div style="border: 1px solid gray; padding: 10px; text-align: center;"> <p>9. All participants were treated equally and respectfully</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px;">Strongly Agree 92%</div>  <div style="border: 1px solid gray; padding: 5px;">Tend to agree 8%</div> </div> </div>
	<p>Comments:</p> <p>‘Accessibility issues – steps to toilets and so on, also standing during exercises for a little too long’.</p> <p>‘Great group of people who treated each other equally’</p> <p>‘Group leaders very good at drawing all attendees into the conversation’.</p> <p>‘I did wonder if the participants were not very respectful of Edna (the elderly persona)! Do you need to separate out elderly lady from elderly lady who has difficulty with handling new situations, detailed written material’.</p>

10	The public participants were motivated, interested and committed	<p style="text-align: center;">10. The public participants were motivated, interested and committed</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Strongly Agree 81%</div>  <div style="border: 1px solid gray; padding: 5px; text-align: center;">Tend to agree 19%</div> </div>
<p>Comments:</p> <p>'Real mix, some quieter than others, some more interested but the balance was there'.</p> <p>'Real concentration throughout the workshop'</p> <p>'The vast majority of the participants had been affected by flooding, and so had a keen interest and commitment in taking part.'</p> <p>'Definitely by their normal standards'</p> <p>'Some may have drifted later on during the day'.</p> <p>'Although it was hard to bring some into the discussion'</p>		
11	This type of process <b>should be</b> used to inform how flood risk agencies communicate risks to the public	<p style="text-align: center;">11. This type of process should be used to inform how flood risk agencies communicate...</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Strongly Agree 81%</div>  <div style="border: 1px solid gray; padding: 5px; text-align: center;">Tend to agree 19%</div> </div>
<p>Comments:</p> <p>'Will be more effective for Environment Agency than local authorities'.</p> <p>'I would like to use similar exercises for other aspects of community engagement in emergency planning'.</p> <p>'Liaison with public is key'.</p>		
12	The outputs of this process <b>will</b> improve how flood risk agencies communicate with the public	<p style="text-align: center;">12. The outputs of this process will improve how flood risk agencies communicate with...</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Don't Know 8%</div> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Strongly Agree 58%</div>  <div style="border: 1px solid gray; padding: 5px; text-align: center;">Neither 7%</div> <div style="border: 1px solid gray; padding: 5px; text-align: center;">Tend to agree 27%</div> </div>

	<p>Comments:</p> <p>'But dependent on resources'</p> <p>'Depends on the results!'</p> <p>'Clear messages provided with notable consistency' 'If agencies taking the findings on board it could'.</p> <p>'Understanding helps. Expectations are high. Resource balancing will be a challenge'.</p> <p>'I found the event very useful. The sessions were well structured, had a good pace and the group leaders made sure that everyone made a contribution. Wonderful having someone recording the feedback so that I could listen rather than concentrate on capturing what people were saying'.</p> <p>'That is one of the aims of our project'.</p> <p>'There was a lot of feedback from the participants so this should improve how flood risk agencies communicate with the public'.</p> <p>'Depending on what plan is for outputs'</p> <p>'Communication of outputs is an inherent issue in government bodies so let's hope key messages are shared'.</p> <p>'The rural community highlighted the point that not everyone has internet access. Need to make sure the outputs recognise this'.</p> <p>'I hope the findings and recommendations from these workshops will go on to directly influence our communications. However, due to some of the large issues raised (such as the risk categories and keys on our flood maps) I am uncertain as to whether they will'.</p>
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13) What benefits did you gain personally or professionally from observing this event (if any)?

	<p>'Professionally from listening to views of residents in urban areas who haven't flooded and realise how little they know'.</p> <p>'The chance to listen to real people instead of what councillors and management thinks those people need to hear'.</p> <p>'For me it's about tailoring action messages to individual people's circumstances and location'.</p> <p>'Gained more of an insight of how people respond to flooding information'.</p> <p>'Valuable lesson in just how powerful the exercise of 'listening' is. Would like to employ similar exercise (see 11 above)'.</p> <p>'Eye-opening in terms of views and expectations of those who've been flooded - high expectations of info they should receive but also very self-reliant'.</p> <p>'The lack of trust of all agencies. It is very hard to get this back once we have lost it. The confusion between products such as the Met Office Warnings and the Environment Agency warnings due to the lack of consistent in language and colours. You can provide all the information in the world to try and educate people but you can't make them learn and engage. Talking to people face-to-face is the best way to get the</p>
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message across'.

'Renewed contacts with local people who I have not seen for a while and things that need following up on.

People, even flood victims, understand less than I expected. We need a basic 'understanding flood risks and what you can do' course/presentation'.

'Lots of lessons to learn on organizing good workshops'

'Excellent opportunity to gain an insight at the ground/local level'

'Hearing the views and experiences of people who were unfortunate enough to flood'

'Confirmation that 'traditional' methods of engagement are hugely worthwhile'.

'As a public servant working at head office I don't often meet the public so really refreshing to do so and to see and hear for myself how our information on flood risk is used and interpreted'.

'I used to engage with communities at flood risk on a weekly basis however changing role six years ago meant I had very little interaction with the public since. This event helped me to reconnect with the public views, which I think is an important thing for National Head Office staff (with very limited community engagement) to do'.

'Will improve the flood information made available by Natural Resources Wales'.

'Reassurance that public/community have valuable messages and are willing to listen and share. Event well-orchestrated'

'Realising the huge variation in opinion on what should be done'

'It's good to see the public using the data we created and how they do/don't understand it'.

'It was good to see the things that I hear in my day to day job being recognised officially. I hope that the opinions given by the public are acted upon'.

'In my role I deal with members of the public on a daily basis, however, they are usually at flood risk and have actively attended one of our meetings or drop in sessions. This event was useful to hear from members of the public not directly affected by flooding and get their views and opinions on how we communicate regarding flooding. Many of their thoughts and findings were concurrent with what me and my team hear on a regular basis however from these workshops I hope a more structured series of recommendations is made and implemented.

'Lovely to see what changes specialists heard – how some of their materials were really not hitting the mark and they need to respond to that'.

'Really good insight into public knowledge/perception re flooding'

'It was very interesting to me to find out what actually is important to the public. They want punchy information and advice not a 'sell' from us'. 'There's a long way for us to go still, but we thrive on it!'

14) In what ways did attending this event affect your views of public engagement (if any)?

'That the way we communicate currently and engage is not working for urban areas not having experienced recent flooding'.

'I think we have under-estimated levels of understanding and the willingness to engage'.

'Made me more enthusiastic'.

'Increased confidence in using such events in the future'

'Surprised by just how productive it was. Excellent ideas and contributions from unexpected quarters. Never underestimate people!' 'Confirmed that it's very worthwhile'.

'Haven't changed: I always knew this was the best way to get concentrated consultation'.

'The event really reinforced the essential need to engage with the public. We could produce the best technical and scientific information on flood risk but if the public don't understand it and then don't take appropriate action then we are no further forward'.

'Most engagement of this type is after a flood – it is useful to have views in “peace time”'.

'Having event during 'peace time' has helped to ensure all views are measured and not emotive as would be the case during after an event'.

'Very positively – needs to be public engagement early, like this, not just user testing of proposed products'.

'I assumed most communities had internet access, therefore thought this was the best way to communicate information. This event highlighted the fact that everyone doesn't have internet, therefore we need to explore other methods of communicating information'.

'It did not change my views'.

'It once again reminded me to properly explain and simplify as best we can our flood risk literature and maps when speaking with members of the public. As we see these products everyday it is easy to expect everyone to understand them however this is clearly not always the case'.

'It's super important. The innocent eye can see so much their technical brains are blind to'.

'I think it was good to engage in this level of detail and to pay participants and hold the event at the weekend gets to a different demographic then we normally engage with'.

'Just that it remains a challenge'.

### **Lessons for the future**

15) Overall, what do you think worked best in this event? Do you remember anything specific that worked well?

'Session on what people thought of flood maps'

'The mixture of participants and the variety of activities'

'The questions section on the evening session was enlightening'.

'Both presentations and interactive activities worked well'.

'Group discussions went very well. Groups of weight or so seemed perfect. Well facilitated'

'Mix of people from different locations'

'Personal experience sessions better than character sessions'

'Good pace, enthusiasm, listening'

'Very professional and well structured'

'Togetherness of the group. Strong leadership from the facilitator'

'Very well organised'

'I felt all the 'experts' felt comfortable going in to the 'neutral zone' (that is, didn't feel the need to defend what we do) and I think this helped the public and experts come together as a group with a common cause'.

'Getting people to be very honest about what they think about flood maps (and our communications) worked very well'.

'Moving us around the tables helped get a broader view from those involved'.

'Keeping messages focused. Therefore important that facilitator directs discussion which leads to structured debate'.

'Hearing real Floodline call'

'The session at the beginning where we had to get up and form a line about who had been affected by flooding. This got everyone talking to each other and put everyone at ease'.

'Everyone contributed well on each of the tables'.

'I think the interactive flood map session on the Tuesday evening was particularly useful'.

'Critiques of materials – brilliant. Real knowledge about what real people do – Radio 1, not local radio and so on'. 'Fire risk, they never talk about risk'.

'Making sure we listen AND ACT!! I would like to know if we will ever feedback to this group'.

'The participants were put at ease - they were the focus and they were listened to not talked to!'

'Having different characters was quite good as people didn't need to talk as if it was just them'.

#### 16) What do you think worked least well?

'First action for people putting dots on poster. Some not sure what to do maybe need to review this once dots put up and summarise findings'.

'The map activity of Tuesday was difficult as we were looking at paper versions of an interactive website. Opps for partners to test campaigns/feedback and so on' 'Would have been good to have a Met Office person there'.

'Nothing'

'Felt some of the conversations around the imaginary characters were a bit forced. Better engagement achieved when people reflected on their own circumstances'.

'Trying to get participants (or at least some of them) to think in character' 'Structured – essential but needed a free flow session/some more context'.

'I think people had difficulty thinking themselves into the persona (for example, Edna and Samir). In the Samir group no-one was a Twitter or Facebook user and so could not comment on how he would use these tools'. 'Presumably you use the persona to get people talking in a non-intrusive way and focus conversation ... however in this seminar I think people were happy to share their own experiences/view'. 'Greater number of delegates not affected by flooding'

'Noise from a loud band' (York)

'I thought the characters were going to be individuals 'acting' not in groups'.

'Some of the technical flood information presented to the group was done by the facilitator and think it could have been better presented by one of the experts (assuming technical aspects were covered in a non-technical way)'.

'The presentation about different types of flood risk. This I think could have been shorter and more location specific. I believe an issue with technology out of the facilitators control meant that this wasn't the case on this occasion'.

'Nothing'.

'Nothing that springs to mind'.

'Scenario of student Samir as that group struggled to put themselves in his shoes as to realistic scenarios'.

'Needed to make it clear at the beginning of the session the differences between Environment Agency and Natural Resources Wales'.

'I think the facilitator was a bit leading in one place: 'do you agree that you are more aware of the river than people living in more urban areas?' The way it was said made it difficult for the group to disagree'.

'Nothing'

'Sadly not quite enough/mix of people – really wanted some B+B and caravan people (recruitment agency problem)' (Skegness)

'The PowerPoints were mainly words – this is boring and bad practice'.

'Not sure the clips used flowed that well. Shame that not as many turned up as hoped for' (Skegness).

17) Are there any specific lessons about public engagement you would like flood risk agencies to take from this event?

'More targeted info on local area for people to know what it means to them'

'More is better and it is almost impossible to predict how the public will respond. Range of audience is also key'.

'Use variety of local partners (for example, supermarkets, schools) to raise awareness and what to do

'Don't wait for a flood event to happen (make hay while the sun shines) to spread flood risk awareness.

Simplify messages, other formats, single point of reference, greater publicity, more face to face'

'Not to expect a consensus'

'We need to work out the benefit vs cost of local engagement activities compared to risk based engagement'.

'The importance of events like this and the insight that can be gained'.

'More working together was prompted, make the most of incidents and (sensitively) use them for marketing'. 'More business savvy'

'I think we need to look more carefully at what we say in our literature and then check if that's exactly what we do. It might not be necessary change what we do but we need to better describe it and list any limitations.' 'Let's do more if possible'.

'Cross section of public is important. Need to collate feedback from those not at risk and an impartial view is valuable'.

'Amazing shift in awareness of flood risk as well as lessons we learned'.

'Making sure that after the project something is actually changed. A lot of these projects result in a report, which is then put on a shelf and nothing happens about it for five years, then another project happens'.

'The difficulty the public have in interpreting the maps. The use of the term "low risk" the public feels that this means there is no risk. No one recognised Natural Resources Wales. Natural Resources Wales needs to be much more widely publicised as a flood body'.

'To remember who our communications and information are aimed at and therefore make them as easy as possible to both find and understand.'

'Test out your potential materials and comms routes well – not with PR agencies or internally. Have emotional and 'wonder' triggers as well as the rational'.

'Yes if we want to truly engage with a wider spectrum of society (which we should) we need to go looking for them - not just continue to engage with the traditional demographic'.

'Dedicate more time/money and resources to it'.

18) Is there anything else you would like to add?

'Don't be afraid to "shock" people into taking action'.

'Should include comms officers in other sessions (to observe) and possibly local councillors so they can see how public reacts to topic'. 'Probably the most productive day at work this year'

'If we had more notice of the event we may have been able to provide more help and support'.

'The whole exercise benefitted from the particularly friendly and relaxed tone that was set by the entire group of facilitators'.

'Coordination pre event was more limited that it should have been. I was expected to answer questions about a variety of Environment Agency subjects with no warning. Also no contact number for the day if late and so on – H&S issues'.

'Excellent event – many thanks for the invite'

'I knew we would gain benefit from the day but it has been so encouraging to hear how participants have felt empowered – amazing!'

'I'm sure there will be a long list of recommendations to improve our flood risk communications so we'll need to think carefully about what we can deliver quickly and at not much cost'.

'The event was well organised, and the participants were very keen and interested. Some of the participants had travelled a fair distance to attend so the preparation and communication to recruit the participants was obviously well thought through and effective'.

'Well facilitated and presented' 'Area input and knowledge is important'.

'Excellent days'

'In the Welsh sessions there could have been a greater influence on the fact that Environment Agency no longer operates and that Natural Resources Wales has taken over its functions. I feel as some of the presentations had Environment Agency logos this may have caused some confusion'.

# Annex D: Dissemination activities

Event	Dissemination type	Date/presenter	Audience	Message
	Presentation and discussion	16 June 2014 JAC	Defra Flood Management	Defra seminar Overview of work and early ideas of results (15–20 participants)
International Conference on academics and results. Focus on	Presentation and published	16 July 2014	International audience of and early ideas of	Overview of work and paper <sup>1</sup> JAC
Risk Analysis	practitioners interested in		messages for engineers (ICVRAM2014) natural hazards	
Environment Agency customer with	Webinar JAC Agency staff who techniques and what	16 July 2014	Internal Environment results. Focus on network meeting	Overview of work and early ideas of work directly
			the public (such as external relations)	the Environment as Agency could learn.
Seminar with Flemish Environment Agency	Presentation and discussion	15 September 2014 JAC	Flemish Environment Agency, Defra, Environment Agency representatives	Overview of work and what the dialogues are telling us about property level protection and insurance
Environment Agency Incident Management Team	Presentation and discussion	24 September 2014 MS	Environment Agency internal Incident Management senior managers	Overview of work
Environment Risk Board	Presentation and discussion	14 October 2014	Environment Agency Flood and results. Steer on Risk Directors way forward. Management MS/JAC	Overview of work Agency Flood and
Defra/Environment Agency Stakeholder Forum	Presentation and discussion	11 November 2014 MS/JAC	All Environment Agency stakeholders (over 50 NGOs and authorities)	Overview of work and results
Sciencewise and insights into the	Webinar	19 November 2014 JAC	BIS-Sciencewise Overview of work webinar	November stakeholders dialogue process and benefits. 63 signed up and 37

<b>Event</b>	<b>Dissemination type</b>	<b>Date/presenter</b>	<b>Audience</b>	<b>Message</b>
Responder News	Newsletter	Autumn 2014 MS/JAC	Emergency responder community	Overview of work and early ideas of results
Flood Defence Expo 2014	Presentation and discussion <sup>2</sup>	4 December 2014 MS/JAC	Flood risk management consultants, practitioners	Overview of work and results
Research Management Team	Presentation and discussion	January 2015 JC	Research management team	Overview of work and results
Neighbourhood Plan (NHP) Steering Group	Presentation and discussion	March 2015 MS/JC	NHP stakeholders	Overview of work and results
Regional Flood and Coastal Committee (RFCC) chairs	Presentation and discussion	tbc MS/JC	All RFCC chairs and Environment Agency EMs	Overview of work and results
Environment Agency Flood Risk Management Board	Presentation and discussion	March 2015 MS/JAC	Environment Agency Flood Risk Directors	Overview of work and results. Steer on way forward.
European Geophysical Union	Presentation	May 2015 MS	International audience of academics and practitioners interested in natural hazards	Overview of work and results

Notes: \*JAC – Jacqui Cotton; MS – Mike Steel

1 <http://www.icvram2014.org/index.php>

2 <http://www.flooddefenceexpo.co.uk/>



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