



Tracing the impacts of public dialogue projects supported by Sciencewise:

Flood risk communications

March 2016

Flood risk communications

Key facts

Date

November 2013 – December 2015

Costs

- Total cost of project: £360,800
- Sciencewise funding: £140,000

Commissioned by

Environment Agency

Delivery

3KQ

Evaluation

URSUS Consulting

Sciencewise Dialogue and Engagement Specialist (DES)

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Introduction

This public dialogue project, supported by Sciencewise, was established by the Environment Agency to explore messages about flood risk, and to develop innovative methods and techniques to help individuals and communities understand their risk of flooding. The implications of the project for wider risk management drew a wide range of other agencies into the project.

The dialogue project in summary

The institutional and regulatory landscape for managing flood risks in the UK is complex, with several organisations involved including the Environment Agency, Natural Resources Wales, the Met Office, local authorities and local 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.

The Environment Agency has responsibility for ensuring that communications are appropriate for their audience and to help develop and promote a better understanding of flood and coastal erosion risk. The Agency was aware that maps to show flood risks needed updating and that other types of flood information were not meeting the needs of people at risk of flood. In 2013, the Environment Agency and Defra agreed that it was an appropriate time for a larger, more ambitious approach to working with members of the public to discuss how best to communicate about flood risk and encourage people to take action where possible.

The dialogue project supported by Sciencewise aimed to explore risk perception and response in relation to flooding, and to generate practical materials (messages, materials and approaches to the use of different media) designed to increase awareness, encourage engagement and improve responses to flood risk. The results were intended to inform the way that the Environment Agency presents its flood maps and the way it coordinates with other agencies over these kinds of communications. It was also intended to provide a basis for agencies working with communities at risk of flooding to be more consistent and joined up in their communications and action.

The objectives of the public dialogue project were:

1. To review the current issues surrounding flood risk communications and lessons learnt from other countries or disciplines.
2. To co-create, with members of the public, ways of helping individuals and communities better understand flood risk; link risk to appropriate action; and feel empowered to take action.
3. To help agencies adopt a consistent approach to conveying risk and likelihood, enabling them to join up their subsequent activities.
4. 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 main elements of the project were:

- An Oversight Group, set up prior to the detailed design of the dialogue and the appointment of contractors to agree focus, support the process and enable action based on the outcomes of the project. The Group comprised 18 members from the following stakeholder organisations: Environment Agency; Met Office; Hampshire County Council; Red Cross; Public Health England; Cambridge University; Welsh Government; Department for Business, Innovation & Skills (BIS); Lancaster University; Department for the Environment, Food and Rural Affairs (Defra); Northumbria University; National Flood Forum; Cabinet Office; a local authority councillor; Department for Communities and Local Government (DCLG); and Natural Resources Wales.

Working with the Oversight Group, the project team designed a multi-stage process including three stages of stakeholder input and reflection either side of a three-stage public dialogue process across five locations.

- A literature review and mapping exercise on the crucial issues of current flood risk communication, drawing together evidence from published sources and new interviews.
- A design and development workshop for key stakeholders in February 2014, which discussed the findings from the review and mapping, agreed the critical points in the current system that needed to be strengthened, and identified specific areas for the dialogue to discuss. The workshop conclusions fed into the detailed planning for the dialogue process including the appropriate selection of public participants.
- The public workshops were held in two stages in each of five locations between May and October 2014. This involved a midweek evening introductory session, followed by a full day on the Saturday. Locations were chosen for geographical diversity and to represent a mix of locations that had relatively recent experience of flooding (Oxford and York), and those that were at high risk of flooding but with less recent experience (Leicester and Newtown). Skegness was originally chosen as somewhere that hadn't experienced flooding, but the recent tidal surge – although not leading to any direct impact on homes – meant that participants in this area had a heightened awareness of flood risk compared to those in Leicester and Newtown. Members of the public were recruited to be broadly representative of the population in each of the five locations. Between 22 - 24 public participants attended most workshops (a total of 98 participants across these workshops), plus between 4 and 7 specialists at each event to provide additional information (30 specialists took part overall). There were two full day workshops at each location with participants being asked to undertake some "homework" on flood risk communications between the two workshops. The Oversight Group had met throughout the planning and delivery and at least one member attended each event. The results of these workshops were considered by an Oversight Group meeting in October 2014, which agreed the plans for the reconvened workshop.
- A (third stage / reconvened) workshop was held in Birmingham in November 2014. This event brought together 28 public participants (4-6 from each of the five earlier locations) with representatives from Public Health England, Red Cross, National Flood Forum and the Environment Agency. This workshop was designed to produce more concrete recommendations to take forward.
- A final Oversight Group workshop in February 2015 reviewed the final report and developed an initial action plan which was subsequently further developed by the Environment Agency and delivery team.
- A web portal – <http://floodriskdialogue.org> – was launched just before the first public event. The site was designed to sit alongside the dialogue workshops in order to facilitate information sharing and act as a resource for project partners, dialogue participants and the general public.

The key messages¹ from the public workshops were:

- 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.

The initial set of workshops provided a lot of detailed feedback about a range of communication materials. Alongside comments on specific materials, some overriding **principles** emerged from this first round of workshops:

- Think about the needs of different audiences.
- Don't assume a little bit of information will scare people – telling the truth about risk and impacts is more likely to lead to action.
- Stop talking about probability and risk in mathematical language as it means very little to a lot of people.
- Be really clear with people on what is happening before, during and after a flood, and what actions they should take.
- If you are asking people to take individual actions, tell them (in the same communication) about what local / national organisations are doing too – i.e. we're all in this together.
- Focus on making information local, with historical context.
- Don't just focus on the negative impacts of flooding – focus on what people can do about it.

¹ Text on key findings from Sciencewise case study

The Environment Agency themselves took three key messages from the dialogue project and used those to develop their own materials:

- Lack of knowledge about what a flood impact is, what it would do to people's lives and homes. Existing communications materials did not address that.
- Lack of knowledge about who was responsible for flood risk.
- Self efficacy – people didn't know what people could do about flooding that would make a difference.

The main advantages of the approach for the Environment Agency were that the opinions and feedback on the materials came directly from the public through discussion, the scale of the exercise (with a good number and range of public participants in workshops in five different locations, and then a reconvened event), and the credibility of the methodology:

"That scale is important because it demonstrated consensus of people who all said the same thing about our materials. So the fact that it came from the public and it came from discussions as opposed to market research. That gave a validity to the results and that validity led to the impact that we have seen ... From my perspective credibility came with the methodology ... the size of the dialogue and the representation of people at the event. The demographic, the age and gender profiles that we managed to get. Credibility was built in to the methodology and credibility also came about because of the evaluation. There was an independent evaluator who was making sure that the methodology and the design and the representation of people at the events was appropriate. The evaluation is useful but public dialogue by itself cannot be credible unless your method of bringing people in and designing it are credible. ... the whole methodology design is essential to that credibility."(Environment Agency)

The differences between dialogue and market research were important for the Environment Agency, and contributed to the value of the dialogue approach for them:

"It is not just people saying 'we don't like your flood map' or 'we don't understand them' it's a case of saying why? And also what would be better? In the past we have often done these things where we've asked people do you understand our maps? do you not understand? But because it is done in a market research setting we have never had the insights to describe why or an alternative. So one of things the dialogue gave was an opportunity to discuss with people. ... So the insights in to why it's not quite right were really useful. A specific example is: when we've described flood risk in the past we used statistics or we had used statistics like we'd say 'a 1 in a 100 year flood' or a '1% chance of a flood' and one of the things people hoped would come out of the dialogue was an alternative way of describing it. So people would say no we don't understand it and then, in a market research setting there is not much chance to examine that. But what we found out in the dialogue was that we didn't need to find another way of describing it we just needed to not use it at all. The conversations enabled far more depth which then meant we knew what to do as a consequence. It wasn't just a case of doing another project where we said the public don't understand flood risk, it was the case that the public don't understand flood risk and this is the reason why and this is what we need to do about it. So there is a very proactive output of it where market research just gives us statistics and a small amount of qualitative data to say that people aren't engaging with our material very well without the opportunity to go in to more detail about that." (Environment Agency)

Dissemination of dialogue results

- The project report was published on the Environment Agency and Sciencewise websites in December 2015². The evaluation report was published in March 2016³.
- Dissemination of the dialogue results was a core part of the project planning and started as soon as findings began to emerge from the workshops with the public, after which the Environment Agency team disseminated the results to other government departments, non-government organisation and corresponding government agencies elsewhere.
- Continuous drip-feed of results through emails, blogs and presentations within participating organisations, through 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. This early and continuing dissemination of results was seen by the independent evaluation to have created and maintained a high level of interest and a gathering momentum ('created a beast that everyone knows about').

² Public dialogues on flood risk communication. Environment Agency SC120010/R1. <http://www.sciencewise-erc.org.uk/cms/assets/Uploads/Publicdialoguesonfloodriskcommunicationreport.pdf>

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/506398/Public_dialogues_on_flood_risk_communication_-_evaluation_report.pdf

- In particular, the Environment Agency project manager communicated extensively with all stakeholders throughout the project, and brought organisations together for the final meeting, plus holding individual meetings with those that could not attend.
- The results of the dialogue were presented to audiences including:
 - The Environment Agency's operational and executive teams
 - Oversight Group member organisations including Defra, Cabinet Office, and DCLG
 - A seminar in September 2014 for the Flemish Environment Agency
 - The Defra/Environment Agency Flood and Coastal Erosion Management Stakeholder Forum on 11 November 2014
 - The International Conference on Vulnerability and Risk Analysis and Management, and International Symposium on Uncertainty Modelling and Analysis, in Liverpool in July 2014
 - The Flood Defence Expo conference in London in December 2014
 - Regional Flood and Coastal Committee Chairs 2015
 - The European Geophysical Union conference in May 2015
- The dialogue approach was presented to the Environment Agency evidence directorate in February 2016 where the concept was introduced to research scientists in areas such as air pollution, catchment management and agriculture. This is one of a series of learning events using the dialogue experience within the Environment Agency.

Impacts on policy

- **November 2014.** The project itself included specific meetings and other activities to turn the results of the dialogue into action. By November 2014, 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 etc.).
- **February 2015.** Further actions started as soon as the project report was completed, including work to improve website access and information, revising flood maps, linking the work to coastal review recommendations, and discussions through the Wales Flood Group. An implementation plan for the dialogue was also developed, detailing extensive further planned actions.
- **March 2015.** Four key Environment Agency communications teams identified immediate actions and the need to develop a core narrative for communications with the press and others. Within the following months further actions ranged from the very tangible for directly public-facing flood risk communication roles (within the Environment Agency, Natural Resources Wales, National Flood Forum) to more indirect impacts for those whose main role was to influence other agencies (such as Cabinet Office, Defra, DCLG, the Welsh Government, Flood Forecasting Centre). These stakeholders reported they would 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.
- **December 2015.** When the dialogue report was formally published in December 2015, the chair of the project Oversight Group summarised that the immediate impacts included plans to update Environment Agency mapping and flood information systems:

"We are already using them to assist in our work with community groups, in the redesign of our new flood warnings system and our flood maps.... We've taken this feedback and used it in the redesign of our live [flood warnings service](#), launched earlier this year. Now when you land on the page, you're given an option to enter your postcode to search for warnings and river levels in your location. Although, the [map](#) is still available for those interested in the bigger picture. We've also taken on another recommendation by combining this information with advice on how to prepare for a flood." John Curtin, Director of Incident Management and Resilience, Environment Agency.

At the same time, the Environment Agency published a summary of all the dialogue project reports and a list of current actions which included: work on revising flood maps; feeding dialogue outputs into the Flood Re process with insurance companies; and finalising a film of the dialogue process. Future actions included: producing a simple document clarifying roles and responsibilities before, during and after a flood; working to better link flood maps and warnings; and producing new communication documents based on feedback from the dialogue. The Agency also confirmed that:

"The results of this project will inform the way in which the Environment Agency presents its maps of flood risk and the way it coordinates with other agencies over these kinds of communications. The results will also help all agencies working with communities at risk of flooding to be more consistent and joined up in their communications and action." Environment Agency

- **December 2015.** The outputs of the dialogue were used to write a briefing note for the winter floods for operational staff in Cumbria, Yorkshire and Lancashire.

- **11 January 2016.** Three senior individuals from the Environment Agency gave oral evidence to the House of Commons Environment, Food and Rural Affairs Committee one-day hearing on the winter floods: Sir Philip Dille, (then) Chairman of the Environment Agency; Sir James Bevan, Chief Executive Officer and David Rook, Deputy Chief Executive.

David Rooke, the Deputy Chief Executive of the Environment Agency referred directly to the dialogue project, explaining that the dialogue results continued to impact Environment Agency actions. This was in answer to a question from Committee member Simon Hart:

Simon Hart (Q57): *"...I just wondered, in the communication of all of this, whether you are satisfied that the distinction between risk management and risk elimination is fully understood by everybody you have to communicate with, including the media, for that matter. The basis of the evidence you have given us is that you are never going to be able to have flood-alleviation machinery on the ground, movable or immovable, that can cope with the sort of weather conditions you had. Therefore, it is about managing expectations. Are you where you need to be as far as that is concerned?"*

David Rooke: *"... we undertook a science project called Sciencewise. We had a number of focus groups, including one in York, which gave us really good feedback and evidence in terms of how we might improve the language we use in communicating risk. We will be using the findings from that research, which was quite recent, to improve the way we communicate."*

<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environment-food-and-rural-affairs-committee/winter-floods-201516/oral/26721.pdf>

- **February 2016.** Continuing work to use the messages and learning from the dialogue project includes incorporating the results into the Agency's digital services; refreshing communications channels – flood warnings and flood maps.

There are also plans to test the economic benefits of the new communications materials, developed as a result of the project, in two pilot projects to be completed by September 2016. Different materials are being tested in two different areas to see the effectiveness of the materials – effectiveness will be tested by measuring the number of people who sign up to the flood warning service. The Agency see this as a relatively crude measure but one that can be quantified quite easily. There are economic benefits associated with that, which can be quantified and then the benefits of the new materials can be quantified. If the approach is shown to work, it will be expanded to the rest of the country.

Impacts on the Environment Agency internally

The public dialogue has influenced the Environment Agency thinking about public consultation more generally:

"The approach that was used, the actual public dialogue approach has influenced thinking elsewhere ... generally that public dialogue approach, whether it is Sciencewise or otherwise, has been thought about a little bit more when we're doing public consultation. So the whole approach has been considered more carefully as a viable way of thinking about consultation. So I think that has made a lot of people think about how we do it, beyond the actual specifics of the project."

"It's changed our mind-set quite a lot [within the Environment Agency]. One of the main things that it has done is that lots of people anecdotally knew we weren't doing something quite right but didn't have a solution or a reason to explain why not. ... it's had quite a large impact. I've been working in the research team for eight years and it is the first time we've ever done a project that's had this scale of impact. That's kind of where it sits in the grand scheme of things. It's massive."

Impacts on wider policy activities

The Environment Agency reports that one of the dialogue partners is using the dialogue approach themselves:

"Natural Resources Wales is replicating the dialogue approach with their climate change adaptation work ... they are using a kind of dialogue approach for that. So I know that's been expanded."