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Flood Resilience Community Pathfinder Evaluation

Final Evaluation Report

Annexes

October 2015



Llywodraeth Cymru
Welsh Government



Joint Flood and Coastal Erosion Risk Management
Research and Development Programme

Flood Resilience Community Pathfinder Evaluation

Final report FD1664

Annexes

Produced: October 2015

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Contents

Annex 1: Pathfinder Project Manager Interviewee List.....	2
Annex 2: Year 2 Pathfinder Project Manager Evaluation Interview Schedule	4
Annex 3: Year 2 Pathfinder Stakeholders Evaluation Interview Schedule (by email)..	7
Annex 4: Pathfinder Stakeholder Interviewee List by Type	8
Annex 5: Year 1 Pathfinder Evaluation Interview Schedule	10
Annex 6: Pathfinders' Human Inputs in Years 1 and 2.....	13
Annex 7: Household Survey Questions.....	18
Annex 8: Community Resilience Indicators.....	31
Annex 9: Thematic Code Tree for Interview Analysis.....	36
Annex 10: DFID Model of Resilience.....	38

Annex 1: Pathfinder Project Manager Interviewee List

Pathfinder project manager interviewee list

Pathfinder	Year 1 Interviewee	Date	Year 2 Interviewee	Date
Blackburn with Darwen	Imran Munshi (Project Manager, Blackburn with Darwen Council) and Christina Worsley (Newground)	07/05/2014	Jonathan Worthington and Imran Munshi (Blackburn with Darwen Council)	01/05/2015
Calderdale	Sarah Ratcliffe (Project Manager, Calderdale Metropolitan Borough Council)	15/05/2014	Sarah Ratcliffe (Project Manager, Calderdale Metropolitan Borough Council)	28/05/2015
Chesham	Anne-Claire Loftus (Project Manager, Buckinghamshire County Council)	01/05/2014	Anne-Claire Loftus (Project Manager, Buckinghamshire County Council)	21/04/2015
Cornwall	Martyn Alvey (Project Manager, Cornwall County Council)	06/05/2014	Martyn Alvey (Project Manager, Cornwall County Council)	25/03/2015
Devon	Martin Hutchings (Project Manager, Devon County Council) Kate Taylor (Environment Agency) Tony Leney (Environment Agency)	06/05/2014	Dorothee Fitzsimmons (Project Manager, Devon County Council)	23/03/2015
Liverpool	Paul Byrne (Project Manager, Liverpool City Council) and Sarah Parkington (NFF)	09/05/2014	Paul Byrne (Project Manager, Liverpool City Council) and Sarah Parkington (NFF)	01/04/2015
Northamptonshire	Josie Bateman (Project Executive, Northamptonshire County Council)	12/05/2014	Josie Bateman (Project Executive, Northamptonshire County Council)	13/04/15
Rochdale	Francis Comyn (Project Manager, Rochdale Borough Council)	13/05/2014	Francis Comyn (Project Manager, Rochdale Borough Council) and Sarah Parkington (NFF)	28/05/2015

Slough	Alex Ludbrook (Project Manager, Atkins subcontracted to Slough Borough Council)	15/05/2014	Alex Ludbrook (Project Manager, Atkins subcontracted to Slough Borough Council) and Elizabeth Ferns (NFF)	24/03/2015
Southampton	Bernadine Maguire (Project Manager, Southampton City Council)	29/04/2014	Bernadine Maguire (Project Manager, Southampton City Council)	23/04/2015
Swindon	Sam Weller (Swindon County Council) Grace (Community Project officer, National Flood Forum)	06/05/2014	Sam Weller (Swindon County Council) and Grace Martin (NFF)	24/03/2015
Warwickshire	Michael Green (Project Manager, Warwickshire County Council) Naomi Gibson (National Flood Forum)	08/05/2014	Michael Green (Project Manager, Warwickshire County Council) Naomi Gibson (National Flood Forum)	26/03/2015
West Sussex	Shane Gindra (Project Manager, West Sussex County Council) Ruth Webb (Community Engagement Officer, National Flood Forum)	07/05/2014	Ruth Webb (Community Engagement Officer, National Flood Forum)	22/04/2015

Annex 2: Year 2 Pathfinder Project Manager Evaluation Interview Schedule

Aims of interviews

1. To give the pathfinder project manager the opportunity to clarify, elaborate and reflect on the contents of their Year 2 evaluation report and final report;
2. To enable evaluation coordinators to check consistency and to explore any queries they have from their reading of the pathfinder's Year 2 evaluation report and final report;
3. To enable evaluation coordinators to gather views of the project manager on:
 - Role of governance/structures to build resilience
 - What types of interventions have been more successful than others, with whom and why?
 - Nature of resilience to flooding being addressed by pathfinder
 - Community engagement
 - Counterfactual
 - Expectations for the sustainability of the project
 - Challenges of evaluation and solutions they have found.

Interview schedule

Year 2 interview schedule

Interview Question
Introduction and governance
1. Since the interview last year, have there been any changes in your role / other personnel from your LA or project partners involved in delivery? <ul style="list-style-type: none">• If so, please can you explain?
2. How has the involvement of each project partner affected the approach of the pathfinder and helped to achieve project objectives?
3. Would this be a useful model to use in other places in the future? Why? Why not?
4. Have there been any organisational issues (e.g. budget, staffing changes, relationship with local

authority) that have affected project delivery In Year 2?

If yes:

- How have you dealt with them?
- How have these issues affected project delivery?

If no:

- Are there any changes that should be made for similar projects in the future?

Resilience

5. Have you used the concept of 'resilience' in your development of the project?

- How useful is it?

6. Of the five areas of resilience, which areas would you say your pathfinder is focussed on?

- Why did you choose to focus on this / these area(s)?

7. Having come to the end of the pathfinder and using the knowledge and experience you now have, what one thing would you like to do that you think would make the biggest difference in terms of community resilience to flood risk?

8. In terms of legacy planning and helping the project become self-sustaining, what systems have you put in place to enable communities to be resilient in those areas in the long term?

Interventions: strengths and weaknesses

9. What does success look like in Year 2?

10. What has gone well in terms of your activities aimed at building community resilience in Year 2?

- Please can you give 1-2 examples of activities that have been successful?

11. What has not gone so well / how you expected?

- Please can you give 1-2 examples of activities that have not gone so well?

[Note: Here we are interested in identifying learning, not judging whether work was good or bad]

12. If there was pathfinder 2, what should be done differently and what would you personally do differently to get the most value from the work?

Community engagement

13. Thinking about your community engagement activities, please can you tell me about your approach to community engagement?

- Where / who did the momentum come from? Did it change?
- Who were you trying to reach and why?
- What has been the role of the NFF?

14. What has surprised you or been an unexpected outcome regarding your community engagement activities?

Economic benefits

15. Did you have a go at evaluating the benefits?

- If yes: how useful was it?
- If no: why not? How useful would it be?

Counterfactual

16. What other factors have contributed to the successes of the project?

Achievements and the future

17. Going back to last year, you said that you wanted to achieve [X – interviewer to look back at last year's interview transcript] – has this been achieved?

18. What is the one key thing the project has achieved that makes you most proud / satisfied and why?

19. If someone came back in two years' time, what evidence of the pathfinder project would you expect they would find?

Annex 3: Year 2 Pathfinder Stakeholders Evaluation Interview Schedule (by email)

Year 2 Pathfinder stakeholders interview schedule

Interview Question	Response
Introduction and governance	
1. How has your involvement as a project partner affected the approach of the pathfinder and helped to achieve project objectives?	
Resilience	
2. In terms of legacy planning and helping the project become self-sustaining, what systems have you / the X pathfinder put in place to enable communities to be resilient in those areas in the long term?	
3. Having come to the end of the pathfinder and using the knowledge and experience you now have, what is the one thing you think would make the biggest difference in terms of community resilience to flood risk?	
Interventions: strengths and weaknesses	
4. What has gone well and what has not gone so well / how you expected in terms of the X pathfinder's activities aimed at building community resilience in Year 2? Please can you give 1-2 examples of activities that have been successful / less successful? <i>[Note: Here we are interested in identifying learning, not judging whether work was good or bad]</i>	
5. If there was pathfinder 2, what should be done differently and what would you personally do differently to get the most value from the work?	
Extra question if appropriate	
6. Has the pathfinder made a difference within [the interviewee's place of work, e.g. the Environment Agency]? If yes, how? If no, why not?	

Annex 4: Pathfinder Stakeholder Interviewee List by Type

Year 2 Pathfinder stakeholder interviewee list

Pathfinder	Type of institution/ organisation each stakeholder interviewee represents
Blackburn with Darwen	N/A (no stakeholders interviewed)
Calderdale	Flood group member Project partner
Chesham	Town council Environment Agency
Cornwall	Flood group member Parish council Flood group member
Devon	Environment Agency Flood group member Town council
Liverpool	Environment Agency School
Northamptonshire	N/A
Rochdale	Water company Environment Agency
Slough	Flood group member Water company Environment Agency Flood group member
Southampton	Community member
Swindon	Environment Agency Fire and Rescue Service University (independent evaluator) Flood group member
Warwickshire	Civil society organisation (independent evaluator) Environment Agency

West Sussex	Environment Agency Flood group member
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Annex 5: Year 1 Pathfinder Evaluation Interview Schedule

Aims of interviews

1. To give pathfinder project managers the opportunity to clarify, elaborate and reflect on the contents of their Year 1 reports
2. To enable evaluation coordinators to explore any queries they have from the pathfinder's report
3. To enable evaluation co-ordinators to gather views of project manager on:
 - Role of governance/structures to build resilience
 - What types of interventions are more successful so far than others, with whom and why
 - Nature of resilience to flooding being addressed by pathfinder
 - Community engagement
 - Counterfactual
 - Expectations for the remainder of the project

Interview schedule

Year 1 interview schedule

Interview Questions
Introduction and Governance
1. Please can you briefly explain your role(s)?
2. This is how I see your project management structure and where your role fits in.... [Describe] Is that right?
3. Who in your local authority are the other personnel involved in delivery? [Excluding contractors, NFF, partners]
4. You have got [X] number of project partners [List the ones of which you are aware]... Could you explain briefly how the involvement of each project partner has affected the approach of the pathfinder?
5. How has your organisational structure helped to achieve project objectives? What has been

helpful about the roles that different people play?
6. Have there been any organisational issues (e.g. budget, staffing changes, relationship with local authority staff or Councillors) that have affected project delivery?
If YES: a) How have you dealt with them? b) How have these issues affected project delivery?
If NO: c) Are there any changes that need to be made?
Resilience
7. Of the five areas of resilience, which areas would you say your pathfinder is focused on? Why did you choose to focus on this/these area(s)?
8. In terms of legacy planning and helping the project become self-sustaining, what systems are you putting in place to enable communities to be resilient in those areas in the long term?
Interventions
9. What has gone well in terms of your activities aimed at building community resilience?
10. What has not gone so well / how you expected? [Here we are interested in identifying learning, not judging whether work was good or bad]
11. Depending on the amount of detail on monitoring provided in the report: Could you give me some more detail about how you have monitored the success of your interventions? What is the evidence from your monitoring showing about the results of your interventions?
Community Engagement
12. Have there been specific groups of community members who have been harder to engage with? How have you managed that?
13. Have there been specific groups of community members who have been easier to engage with? How have you managed that?
14. What has surprised you or been an unexpected outcome regarding your community engagement activities?
15a. What criteria do you use to assess value for money of your community engagement approaches? <i>If no assessment criteria used:</i> Does the council use any sort of economic assessment to gauge value for money of your community engagement approaches?
15b. Which of your community engagement approaches give the most and least value for money?
Counterfactual
16. If you hadn't got the pathfinder funding, what would have happened anyway?
The Future

17. Do you anticipate any changes over the next year in terms of your project plan?

If YES:

17a. What sort of changes?

17b. Why?

18. What is the one key thing you hope to be able to say you have achieved this time next year?

Annex 6: Pathfinders' Human Inputs in Years 1 and 2

Pathfinder	Year 1 Human Inputs	Year 2 Human Inputs
Blackburn with Darwen	<p>Community Flood Resilience Officer (Full time from August 2013) *</p> <p>Environmental Consultant (x2, 2 days per week from April 2013)</p> <p>Communications Officer (2 days per week from April 2013)*</p> <p>Drainage Consultant (2 weeks in total)</p>	Not reported in Year 2
Calderdale	<p>Project Manager (3 days per week from November 2013)*</p> <p>Flood Resilience Strategic Partnership Manager (1 day per month)*</p> <p>Business and Economy Team Leader (5% of week)*</p> <p>Emergency Planning Advisor (2 days per week from August 2013)*</p> <p>Emergency Planning Manager (0.5 days per week)*</p> <p>Environment Agency Flood Resilience Officer (x2, 1 day per week)</p> <p>Environment Agency Information and Communication Officer (1 day per week)</p> <p>Countryside and Woodlands Manager (2 days per month from July 2013)*</p>	<p>Housing Project Manager (26 days)</p> <p>Technical staff (110 days)</p> <p>Administration (57 days)</p> <p>Defra Project Manager (½ day per week)</p> <p>Business and Economy Team Leader, ½ day /week</p> <p>Business and Economy Officer 5 days</p> <p>Emergency Planning Advisor (1 day per week,</p> <p>Environment Agency Flood Resilience Officer (x2, 1 day per week)</p> <p>Environment Agency Information and Communication Officer (1 day per week)</p> <p>Environment Agency Project Manager (1 day per month; April – June ½ day per week)</p> <p>Countryside and Woodlands Manager (3 days per month)</p> <p>Education Officer (14 days)</p> <p>Upper Valley Officer (6 days)</p>
Chesham	<p>Buckinghamshire County Council Staff (x3: 1 from April – July 2013; 1 on 2 days per week from August 2013; 1 on 0.5 days per week from March 2014)*</p> <p>NFF Chesham Staff (x2 on 1.04 days per week: 1 from July – December 2013; 1 from December 2013)</p> <p>NFF National Staff (1 hour per month from July 2013)</p>	<p><u>Work package 1</u></p> <p>Buckinghamshire County Council Staff (x2: 1 from April 2014– March 2015 on 3 days per week; 1 on 0.5 days per week in the same time period)</p> <p>NFF Staff (x3: 1 from April 2014 – June 2014 1.5 days per week; 1 from June 2014 – March 2015 on 0.4 days per week; 1 from August 2014 – March 2015 on 2.12 days per week)</p>

	<p>Staff from Chiltern District Council (x3 on 1 hour per month: 1 from March-December 2013; 1 from September 2013; 1 from January 2014)*</p> <p>Officer from Chesham Town Council (1.6 hours per month from October 2013)*</p> <p>Environment Agency Officers (x4, 2.6 hours per month since September 2013)</p>	<p>NFF senior staff (3 hours per month)</p> <p>Chiltern District Council staff (x3: all from April 2014 – March 2015 on 0.25 days per week)</p> <p>Chesham Town Council staff (1 from April 2014 – March 2015 on 0.25 days/week)</p> <p>Environment Agency (x3: all from April 2014 – March 2015 and 1 on 40 hours per year; 1 on 12 hours per year and 1 on 3 hours per year)</p> <p><u>Work package 2</u></p> <p>Buckinghamshire County Council (x2: from April 2014 – March 2015, 1 on 2 hours per week and 1 on 10 hours per year)</p> <p>Transport for Buckinghamshire staff (10 hours per year)</p> <p>Environment Agency staff (x1: from April 2014 – March 2015 on 12 hours per year)</p> <p><u>Work package 3</u></p> <p>Buckinghamshire County Council (x2: from April 2014 – March 2015, 1 on 0.5 hours per week and 1 on 2 hours per year)</p> <p>Chiltern District Council staff (x5: all from April 2014 – March 2015, 1 on 3 hours per year, 1 on 14 hours per year, 1 on 12 hours per year, 2 on 2 hours per year)</p> <p>Environment Agency staff (x2: : all from April 2014 – March 2015, 1 on 12 hours per year, 1 on 15 hours per year)</p>
Cornwall	<p>Project Manager*</p> <p>Town Centre Team Officer*</p> <p>Climate Vision Staff</p> <p>Volunteer Coordinator</p>	<p>Project manager</p> <p>Cornwall Council's media and design team</p> <p>Environment Agency officers</p> <p>Cornwall Council's Town Centre Team Officer</p> <p>Cornwall Council's Countryside Team Officer</p> <p>Climate Vision Staff (1 from September 2014-February 2015 on 24.5 days)</p>

<p>Devon</p>	<p>Project Manager* (Full time from July 2013 to February 2014)</p> <p>Environment Agency Officers (approximately 5 days per month)</p> <p>Devon County Council Flood Risk Officer (approximately 12 hours per month)</p> <p>Plymouth City Council (approximately 12 hours per month)</p> <p>Torbay pathfinder team (approximately 11 hours per week)</p>	<p>Project Manager</p> <p>Devon County Council Staff</p> <p>Environmental Agency staff support</p> <p>Plymouth City Council and Torbay Council staff.</p> <p>Contingency Planning Solutions Ltd. staff</p> <p>Specialist contractor: Hydrologic Ltd staff</p> <p>Devon & Somerset Fire & Rescue Service (DSFRS)</p>
<p>Liverpool</p>	<p>NFF Community Flood Resilience Officer (2 days per week from 22 July 2013)</p> <p>University of West England Evaluators</p> <p>Mersey Forest</p> <p>Valley Community Theatre</p>	<p>Liverpool City Council staff</p> <p>Environment Agency staff (60 hours)</p> <p>United Utilities staff</p> <p>Merseyside Flood Risk Officer (7 hours)</p>
<p>Northamptonshire</p>	<p>Senior Flood and Water Officer for NCC (30 days)</p> <p>RAB Consultants Limited</p> <p>Dave Smith Associates (minimum of 12 hours in total)</p> <p>Volunteers for site walk over</p> <p>Community Flood Consultant</p> <p>Rain gauge installation contractor (to be sourced and approved)</p> <p>Risk and Policy Analysts</p> <p>Anglian Water and the Environment Agency (training of the flood wardens)</p> <p>CAG consultants</p>	<p>Senior Flood and Water Officer for NCC (approx. 30 days)</p> <p>Drainage engineer (27 days + 3 months for reporting)</p> <p>Community engagement contractor</p> <p>Flood store contractor</p> <p>Rain gauge installation contractor</p> <p>Web Development company staff</p>
<p>Rochdale</p>	<p>NFF Community Flood Resilience Officer (3 days per week from 22nd July 2013)</p> <p>Groundwork (Oldham & Rochdale) (1 day per week from project start)</p> <p>University of Manchester (to provide 100 days of support throughout the project to March 2015)</p>	<p>National Flood Forum Community Flood Resilience Officer (3 days per week)</p> <p>Rochdale Borough Council – Specific project support to augment NFF resource through Planning Service – approx. 1 day per week throughout the scheme</p> <p>Rochdale Borough Council and National Flood Forum for additional project management, training provision and supervision through (approx. 4 days per month from each</p>

		organisation) University of Manchester (100 days equivalent)
Slough	Project Director* Technical Officer* Atkins Consultant seconded into Slough Borough Council* Part Time Council Employee National Flood Forum Officer	Community Flood Resilience Officer Project Manager National Flood Forum Officer JBA Consulting staff Independent survey company staff
Southampton	Project Manager (212 hours)* NFF Community Resilience Officer (459 hours) URS Infrastructure and Environment UK Officer (unknown) Project Officer (233.5 hours)* JBA Consulting (unknown)	Project manager (400 hours) NFF Community Resilience Officer (520 hours) URS Infrastructure and Environment UK Officer (unknown) Project Officer (65 hours) JBA Consulting (unknown) Whitehouse Construction Ltd (unknown) Flood Divert Ltd (unknown)
Swindon	Project Manager* NFF Project Officer Civil Protection Unit Officer, East Locality Lead, East Locality Facilitator, Highways Manager, and Health and Safety Officer* Swindon Borough Council UWE Researcher (18 days) UWE Research Assistants (3 providing a total of 28 days) WFARS Officers (2 providing a total of approximately 4-6 hours per week) Environment Agency Staff (2 providing a total of 28 days) NC Staff (9 hours in total)	NFF Project Officer Swindon Borough Council Create studios New College Environment Agency Staff (2 hours per month) Rochdale pathfinder staff Dorcan Academy Year Leader (1 hour per month for the academic year); head teacher 1 hour per month BRC (1 day)
Warwickshire	Project Manager (0.5 to 1 day per week)* NFF Project Officer (5 days per week)* Student Intern (5 days per week)* Warwickshire Wildlife Trust Officer (1 day per week) Warwickshire County Council Observatory (15 person days)	Not reported in Year 2

	<p>Warwickshire County Council Group Manager (5 person days)</p> <p>Warwickshire County Council Finance Officer (5 person days)</p> <p>Warwickshire County Council Highways (10 person days)</p> <p>Coventry, Solihull and Warwickshire Resilience (20 person days)</p> <p>Environment Agency (10 person days)</p> <p>Stratford District Council (5 person days)</p> <p>Warwick District Council (10 person days)</p> <p>Rugby Borough Council (15 person days)</p> <p>Nuneaton and Bedworth Borough Council (5 person days)</p> <p>North Warwickshire Borough Council (10 person days)</p> <p>Severn Trent Water (10 person days)</p>	
<p>West Sussex</p>	<p>Project Manager (1 day per week)*</p> <p>NFF Community Officer (5 days per week)</p> <p>NFF National Staff (0.5 days per week)</p> <p>Collingwood Environmental Planning (2 days per year)</p> <p>Environment Agency Officer (3 days per week)</p> <p>Principal Drainage Engineer (0.5 days per week)</p>	<p>Project Manager (½ day per week for duration of project)</p> <p>Community Resilience Lead (1 day per week for the duration of the project)</p> <p>Environment Agency Officer</p> <p>Drainage engineer</p> <p>Communications team</p> <p>Community Development Team (x2: Project Board Meetings – 20 days, Multi-Agency Meetings – 24 hours; DEFRA report writing 16 days)</p> <p>Resilience and Emergencies support (Chair of the Sussex Resilience Forums (SRF) Community Resilience Partnership - ½ a day per week; Support at events - 11 ½ days;)</p>

Annex 7: Household Survey Questions

Institutional resilience: common questions¹

1. Do you believe your property is at risk of flooding? Do you feel it is:
 - a. Definitely at risk
 - b. Possibly
 - c. Not at all
 - d. Don't know

Source: Environment Agency (2013)

2. In the last 12 months, have you received any advice or support from any source about flood risk and how best to prepare for a flood? This could be in person, on the phone or information sent to your home.
 - a. Yes
 - b. No
 - c. Don't Know

Source: EA (2013)

3. Who do you think is responsible for managing flood risk in your local area? (Please tick all that apply.)
 - a. You and your family
 - b. Local Council
 - c. National Government
 - d. Water Company
 - e. Environment Agency
 - f. Emergency Services
 - g. Other (please specify)

Source: adapted from Liverpool pathfinder

4. Have you ever...?
 - a. Written letters to relevant authorities about flooding? Yes/No
 - b. Attended meetings related to flooding? Yes/No

Source: Sue Tapsell, FHRC (2013)

¹ These headings are for Pathfinders' information – not to be used in surveys.

Your experience of flooding

1. In the time you have lived at your current address, has any part of your own home (including basements and cellars, excluding garages and outhouses) ever been flooded by water coming in from outside, other than from rain leaking through the roof or burst pipes?
- Yes
 - No
 - Don't Know

Source: Environment Agency (2013)

If you answered (b) or (c), please go to [number of next question after this section on experience of flooding]

2. So, before or during your most recent flooding, did your household receive any kind of warning, whether official or unofficial, that your property might flood?
- Yes – had warning before flood
 - Yes – had warning during flood
 - No – no warning
 - Can't remember

Source: MORI (2005)

3. Thinking about your most recent flood, if you did receive a warning, how did you receive it? (Please tick all that apply)
- | | |
|---|--|
| a. Recorded telephone message from the Environment Agency | i. From a television announcement / broadcast |
| b. Personal telephone call from the Environment Agency | j. From a warning siren or loudspeaker |
| c. You telephoned Floodline | k. From BBC Ceefax / ITV Teletext |
| d. From a neighbour / friend / relative | l. Personal observation/saw water level rising |
| e. From a flood warden | m. Warning via a fax from Environment Agency |
| f. From the emergency services | n. other |
| g. From your local authority | |
| h. From a radio announcement / broadcast | |

Source: MORI (2005)

4. Thinking about your most recent flood, if you received a warning(s), did you believe that the property was going to flood?
- Yes
 - No
 - Don't Know
- If yes, why? _____

[Open

Ended]

Source: CEP (2013)

5. After your worst flooding, how long did it take to get your home back to normal?
- Hours

- b. Days
- c. Weeks
- d. Months

Source: MORI (2005)

6. Thinking about your most recent flood, from which sources did you receive help? (Please tick all that apply)
- a) Family outside the household
 - b) Neighbours/friends
 - c) Employees/Work colleagues
 - d) Emergency services: police, fire brigade, ambulance
 - e) Flood wardens
 - f) Local authority staff
 - g) Insurer
 - h) Other (please specify)
 - i) Can't remember

Source: MORI (2005)

7. Approximately, what was the total value of the damage caused by the worst flood to your household contents including cars? Please exclude any structural damage to the property.
- a. Nothing
 - b. Under £100
 - c. £100 less than £500
 - d. £500, less than £1,000
 - e. £1,000, less than £5,000
 - f. £5,000, less than £10,000
 - g. £10,000, less than £15,000
 - h. £15,000, less than £20,000
 - i. £20,000 or more

Source: MORI (2005)

8. Have you experienced difficulties securing insurance as a consequence of flooding or living in a flood risk area?
- a. Yes
 - b. No
 - c. Don't Know
- If yes, why?

[Open Ended]

Source: CEP (2013)

Optional questions

1. If you believe you are at risk of flooding, do you know the source of this risk, i.e. where the flood water might come from? Do you think that the source of the flood risk is:
- a. A river
 - b. The sea
 - c. Rainfall
 - d. Runoff from other areas
 - e. Groundwater
 - f. Other (please say which)
 - g. Don't know.
 - h. Not at risk of flooding
- Source: CEP (2013)*
2. Have you talked about local flooding issues or concerns formally with any official or professional person in the last year (e.g. a local councillor, an Environment Agency officer, an insurance agent, at a formal meeting)?
- a. Yes
 - b. No

c. Unsure

Source: Hugh Deeming (2007)

3. For the most serious flood you have experienced in this house, how serious were the effects of the flood upon the life of your household?

- a. Very serious
- b. Quite serious
- c. Don't Know
- d. Not very serious
- e. Not at all serious

Source: MORI (2005)

Infrastructure resilience: common questions

1. Property type:

- b. Detached house
- c. Semi-detached house
- d. Terraced house
- e. Ground floor maisonette
- f. Ground floor flat
- g. Basement flat
- h. Mobile home
- i. Other (specify)

Source: Sue Tapsell (2013)

2. Have you done any of the following? (please tick all that apply)

Statement	Have already done	Haven't yet done but feel I ought to	I don't feel this is really necessary	Don't know/Not thought about
Found out if home is at risk of flooding?				
Signed up for Flood Warnings Direct (flood warnings sent by phone, text or email)?				
Thought through/ prepared a flood plan?				

Source: EA (2013)

Optional questions

1. Could you tell me approximately when this property was built? Which decade?

- a. Before 1919
- b. 1919-1944
- c. 1945-1959
- d. During the 1960s
- e. During the 1970s
- f. During the 1980s
- g. During the 1990s
- h. Between 2000 - 2009
- i. Since 2009
- j. Don't know

Source: MORI (2005)

2. Have you undertaken any of the following flood protection measures? (please tick all that apply)

3.

Flood Protection Measure	Undertaken
Take out household buildings and/or contents	

insurance against flooding	
Keep sand and bags at the property	
Keep ditches and drains around the property clean	
Landscaping to divert water away from your property	
Purchase water pumps	
Check regularly for flood warnings during high-risk months	
Avoid keeping irreplaceable items or goods of sentimental value on ground floor of your home at all or at certain times	
Installed non-return valves on drains and water inlet and outlet pipes	
Installed flood-gates	
Free-standing temporary flood barriers or a single barrier around several houses	
Other (specify.....)	
Did not take preventative actions	

Sources: Sue Tapsell (2013), Hugh Deeming (2007) and the Liverpool pathfinder (2013)

Community capital: common questions

1. In your neighbourhood (by which we mean your street or block) would you say that you know...?
 - a. Many people
 - b. Some people
 - c. A few people
 - d. Or that you do not know people in your neighbourhood?

Source: Home Office Citizenship Survey (2001)

2. Please indicate how much you agree or disagree with each of the following statements about your local area.

Statement	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree
This area is a close, tight knit community					
This area is a friendly place to live					
This area is a place where local people look after each other					
Most people who live in this area trust one another					
You often see strangers in this area					
I would be happy asking certain local people to keep an eye on my house and property					
The people who live here can be relied upon to call police if someone is acting suspiciously					
If any of the children or young people around here are causing trouble, local people will tell them off					

Source: British Crime Survey (2001)

3. In the past 12 months, how often have you gone to a group, club or place of worship, to meet other people, to help each other out, for faith reasons, or for enjoyment and relaxation (e.g. place of worship, social club, residents' association, sports team, support group, community centre, drama or hobby group, etc.)
- a. Never
 - b. At most three or four times a year
 - c. About every other month
 - d. About once a month
 - e. Several times a month, but not every week
 - f. About once a week
 - g. Several times a week
 - h. Every day
- Source: British Crime Survey (2001)*

4. In the past 12 months, how often have you given time to, or helped out at, an organisation such as a school, a hospital, a prison, a probation office, a charity, a voluntary organisation or a community group (e.g. being a volunteer for one of these organisations)?
- a. Never
 - b. At most three or four times a year
 - c. About every other month
 - d. About once a month
 - e. Several times a month, but not every week
 - f. About once a week
 - g. Several times a week
 - h. Every day
- Source: British Crime Survey (2001)*

5. Which, if any, of the things on this list have you done in the last three years?
- a. Presented my views to a councillor or MP
 - b. Written a letter to an editor
 - c. Urged someone outside my family to vote
 - d. Urged someone to get in touch with a councillor or MP
 - e. Made a speech before an organised group
 - f. Been an officer of an organisation or club
 - g. Stood for public office
 - h. Taken an active part in a political campaign
 - i. Helped on fund raising drives
 - j. Voted in the last General election
 - k. Voted in the last local election
 - l. None of these
- Source: Poverty and Social Exclusion Survey (1999)*

6. To what extent do you agree or disagree with the following statement?
By working together, people in my neighbourhood can influence decisions that affect the neighbourhood
- a. Strongly agree
 - b. Agree
 - c. Neither agree nor disagree
 - d. Disagree
 - e. Strongly disagree
 - f. Don't have an opinion
- Source: General Household Survey (2000/01)*

7. Have YOU YOURSELF, in the last 12 months, BENEFITED from unpaid help in any of these ways? Please exclude help from members of your family (that's any relatives).
- a. Someone keeping in touch with you (visiting in person, telephoning or e-mailing)
 - b. Someone doing shopping, collecting pension or paying bills for you

- c. Someone cooking cleaning, laundry, gardening or doing other routine household jobs for you
- d. Someone decorating, or doing any kind of home or car repairs for you
- e. Someone doing baby sitting or caring for your children
- f. Someone sitting with or providing personal care (e.g. washing, dressing) for you
- g. Someone looking after a property or a pet whilst you are away
- h. Someone giving advice to you
- i. Someone writing letters or filling in forms for you
- j. Someone representing you (for example in talking to a council official)
- k. Someone transporting or escorting you (for example to a hospital, on an outing)
- l. Anything else (specify)

Source: Home Office Citizenship Survey (1999)

8. We've been using the word 'community' in some of the questions. What do you think of as being 'your community'? Is it:

- a. Everyone living in <county name>
- b. Everyone living in the <town name>
- c. Everyone living in the streets around yours
- d. People who attend the same club or faith group as you
- e. Just your family and friends
- f. I don't know
- g. I don't think about it
- h. I don't feel that I'm part of 'a community'
- i. Other group (please specify)

Source: Hugh Deeming (2007)

Optional questions

1. How strong are your feelings of attachment to your neighbourhood, town, region, country and Europe? [Rate from 1 (No attachment) to 10 (Very strong attachment)]

Place	Attachment Rating (1-10)
Your neighbourhood or village	
Your municipality or town	
Your region/ county	
Your country	
The European Union	

Source: Citizen Audit Questionnaire (2001)

2. To what extent do you agree or disagree with the following statement?

Voting in local government elections [i.e. for local authorities at whatever level – county, city, borough, etc.] is important.

- a. Strongly agree
- b. Tend to agree

- c. Tend to disagree
- d. Strongly disagree

e. No

opinion

Source: CEP (2013)

3. Apart from the people you live with, how many relatives that you feel close to live within a 15–20 minute walk or 5–10 minute drive, if any?

- a. One or two
- b. Three or four
- c. Five or more
- d. None

Source: Citizen Audit Questionnaire (2001)

Attitudes to flood resilience: common questions

1. Do you agree or disagree with the following statements? [Please tick appropriate boxes]

Statement	1 Strongly agree	2	3	4	5 Strongly disagree	Don't know
The people in my community will help out if it floods						
I have a good understanding of how to protect my home from flooding						
I know what I need to do if there was a flood warning issued for my neighbourhood						
Flooding is linked to changes in the climate						
Protecting my home from a flood is my responsibility						
Insurance against flooding is affordable.						
I have confidence in local flood						

defence systems						
Preparing my home for future flooding would be worthwhile						
The government is not investing enough money in flood defences						
There is little I can do to protect my home from flooding						
My insurance provides adequate cover for the risks associated with flooding.						
It is possible to predict when a flood will occur						
I believe the area in which I live is at risk of flooding						
I receive regular warnings that my home may flood						
My own home is likely to be flooded within the next 5 years						

Source: Adapted from Environment Agency (2013)

Some questions about you [social resilience: common questions]

1. How long have you lived at your current address? Please tick one.
- a. More than 10 years
 - b. 5 – 9 years
 - c. 1 – 4 years
 - d. Less than 1 year
- Source: CEP (2013)

2. Including yourself, how many people in your household are: [Use Table]

Children aged 9 and under	
Children aged 10 to 17	
Adults aged 18 to 64	
Adults aged 65 to 74	
Adults aged 75 and over	

Source: Sue Tapsell, FHRC (2013)

3. Do you or does anyone in your household have any illness or disability that limits (your/their) everyday activities and has lasted or is expected to last at least 12 months? (Please include problems which are due to old age)

- 4. Yes
- 5. No

Source: Hugh Deeming (2007)

4. Is there a car or van normally available for private use by you or any members of your household?

- a. Yes
- b. No

Source: Hugh Deeming (2007)

5. What is your highest qualification?

_____ [Open Ended]

Source: Census (2001)

6. Does your household do the following: (Please tick all that apply)

- Use a mobile phone?
- Use a smartphone?
- Use the internet at home?
- Read a local newspaper (at least once a week)?
- Listen to a local radio station (at least 3 days a week)?

Source: CEP (2013)

7. What is your main language?

_____ [Open Ended]

Source: Census (2001)

8. What is your gender?

- a. Male
- b. Female

9. What is your age? _____

Optional questions

1. How is your health in general?
- a. Very good
 - b. Good
 - c. Fair
 - d. Bad
 - e. Very bad

Source: Census (2001)

2. On the scale below how often do you use the Internet for your personal use?
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. All the time
 - f. I don't know what this is

Source: Sue Tapsell, FHRC (2013)

3. On the scale below how often do you use social networks for example Facebook, Twitter?
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. All the time
 - f. I don't know what this is

Source: Sue Tapsell, FHRC (2013)

4. If you have experienced flooding, which, if any, of the following did you use to communicate with your family or friends?(Please tick all that apply)
- a. Phone
 - b. Email
 - c. Text Message
 - d. MMS (Multi Media Messaging System)
 - e. Instant Messaging (i.e. MSN, Skype)
 - f. Twitter
 - g. Other Social Network (i.e. Facebook)
 - h. Public Forum
 - i. Other (Please write in)

5. Which of the following, if any, do you use to keep updated about the local flooding situation? (Please tick all that apply)
- a. Social Network (i.e. Facebook, Twitter)
 - b. Public forum
 - c. News Website
 - d. Photos or Videos Website (i.e. Flickr or YouTube)
 - e. Emergency Services information services
 - f. Environment Agency and Met Office Website
 - g. Council Website
 - h. Other (Please write in)

Economic resilience: common questions

1. Does your household own or rent this accommodation?
 - a. Own/ with mortgage
 - b. Rent from council
 - c. Rent from housing association
 - d. Rent from private landlord
 - e. Accommodation tied to job
 - f. Don't know
 - g. Other

Source: MORI (2005)

2. Last week, were you:
 - a. Working as an employee?
 - b. On a government sponsored training scheme?
 - c. Self-employed or freelance?
 - d. Working paid or unpaid for your own or your family's business?
 - e. Away from work: e.g. on maternity leave, on holiday, ill or temporarily laid off?
 - f. Doing any other kind of paid work?
 - g. None of the above

Source: Census (2001)

3. Do you have a household insurance policy which covers you for flood damage?
 - a. Yes – covering damage to the building only
 - b. Yes – covering contents only
 - c. Yes – covering both building and contents
 - d. No
 - e. Unsure

Source: CEP (2013)

Annex 8: Community Resilience Indicators

Purpose: to provide a baseline resilience characterisation of the pathfinder areas.

Specifically it is proposed that the following information will be collected by the evaluation team and / or the pathfinders for the area of influence of the project. By this we mean the whole geographical area the pathfinder interventions are aimed at – not just the areas with household level interventions.

The following indicators are based on categories of resilience developed by Cutter *et al.* (2010: 2)

Community resilience category (based on Cutter et al)	Proposed Variable and Rationale	Proposed Indicators	Data Sources	Who collects ?	Measure of change or background ³
Social Resilience					
SR1 - Educational equity	<i>Educational deprivation</i> increases vulnerability	% of wards with people in the top 10 & and 20% for Education sub-domain IMD	English Indices of Deprivation 2010 – Education, Skills and Training Domain	Collect centrally	Background
SR2 - Age	<i>Older people</i> may be more vulnerable	% of population under 65	Age Structure - Census	Collect centrally	Background
SR3 - Transportation access	<i>Access to private transport</i> increases mobility	% with a car	Car availability - Census	Collect centrally	Background
SR4 - Communication capacity	<i>Access to high speed internet</i> improves access to warning system	% of homes with broadband	Ofcom local authority level data	Ask pathfinders if they have local data Or Collect centrally	Background

² Cutter, S.L, Burton, C.G. and Emrich, C.T. (2010) Disaster resilience Indicators for Benchmarking Baseline Conditions. In *Journal of Homeland Security and Emergency Management*, 7(1)

³ Differentiates between indicators which can be used to show changes during the period of the pathfinder and those which provide background information on community resilience in the area.

SR5 - Language competency	Communities with a higher proportion of the population having English as a second language are more vulnerable	% speaking English as a first language	Household Language - Census	Collect centrally	Background
SR6 - Special need	Disability and long-term health problems increase vulnerability	% population with long-term health problem or disability	Adults with long-term health problem or disability for all households - Census	Collect centrally	Background
<i>Economic resilience</i>					
ER1 - Housing capital	Home owners are more likely to be able to access economic resources.	% homeownership	Tenure - Census	Collect centrally	Background
ER2 - Employment	Lack of employment is usually associated with low economic resources	% economic active % employed (full time or part time)	Data on Economic Activity and Employment by sex - Census	Ask pathfinders if they have local data Or Collect centrally (Different data is available at different levels)	Background
ER3 - Income and equality	Income deprivation is equivalent to low economic resources	Indices of deprivation: % in the top 10% of IMD – Income Domain	English Indices of Deprivation 2010 – Income Domain	Collect centrally	Background
ER4 - Single sector employment dependence	Reliance for employment on sectors that are at risk of damage or disruption from	% employment in fishing, farming, forestry or extractive industries	Data on Industry by Sex - Census	Collect centrally	Background

	flooding (e.g. farming, fishing, forestry and extractive industries) increases likelihood of disruption from flooding.				
<i>Institutional resilience</i>					
IR1 - Flood coverage (insurance)	Flood insurance reduces financial consequences of flooding	% of houses covered by insurance for flooding	Data source to be identified: possibly number of mortgaged properties (you can't get mortgage without insurance)	Ask pathfinders if they have local data	Measure of change
IR2 - Municipal services	Emergency service provision reduces vulnerability	% LLFA expenditure for emergency services	LA revenue expenditure and financing England: 2013 – 2014 LA data	Ask pathfinders if they have local data (national data source is poor)	Background
IR3 – Mitigation (1)	Flood preparedness (awareness and actions) reduces vulnerability	% popn signed up to Environment Agency FWD % popn with PLP measures % aware of flooding	Data source to be identified	Ask pathfinders if they have local data	Measure of change
IR4 – Mitigation (2)	Flood preparedness (existence of flood wardens) increases capacity to respond	Number of flood wardens in area of influence	Data source to be identified	Ask pathfinders if they have local data	Measure of change
IR5 - Previous disaster experience	Previous flood experience increases resilience (preparedness) but is affected	Number of previous floods in x years affecting over 100 properties	Data source to be identified	CEP to ask if Environment Agency	Background

	by the amount of flood damage	Flood damage per flood		has data and Ask pathfinders if they have local data	
Infrastructure resilience					
IN1 - Housing style	Temporary and mobile homes are less resilient.	% housing units that are not bungalows or mobile homes	Dwellings, household spaces and accommodation type - Census	Collect centrally	Background
IN2 Shelter capacity	The availability of temporary accommodation makes it easier to re-house flooded people	Units of accommodation available for homeless people	Data source to be identified	Ask pathfinders if they have local data	Background
IN3 - Recovery	Evacuation centres provide a safe place for people to go	Number of schools / halls as designated evacuation centres within the area of influence	Data source to be identified	Ask pathfinders if they have local data	Measure of change?
Community capital					
CR1 - Place attachment	Migration over short term is associated with reduced sense of belonging	Net migration to area of influence over past 5 years. Second home owners	Data sources to be identified	Ask pathfinders if they have local data	Background
CR2 - Political engagement	Political engagement increases community's ability to influence decisions and access resources	% voter participation in 2010 election	2010 National Election Results from the BBC	Ask pathfinders if they have local data	Background
CR3 - Social capital – civic involvement	Social capital - organisations increase the networks of	Number of community / voluntary / religious orgs in	Data source to be identified	Ask pathfinders if they have local	Measure of change

	relationships and support	area of influence		data	
CR4 - Mitigation and social connectivity	Community engagement in flood groups increases ability to respond to flooding	Number of flood groups or community resilience groups in area of influence	Data source to be identified	Ask pathfinders if they have local data	Measure of change

Annex 9: Thematic Code Tree for Interview Analysis

1. Reflections on the evaluation methodology
 - a. Framework (logic model and resilience capacities)
 - b. Link between project and scheme evaluation
2. Community resilience, focus and usefulness
 - a. Resilience focus
 - i. Economic
 - ii. Community capital
 - iii. Social
 - iv. Infrastructure
 - v. Institutional
 - b. Usefulness?
 - i. Yes
 - ii. No
 - iii. Other
3. Activities and links to resilience
 - a. Community capital
 - i. Challenges
 - ii. Successes
 - iii. Unexpected outcomes
 - b. Economic
 - i. Challenges
 - ii. Successes
 - iii. Unexpected outcomes
 - c. Infrastructure
 - i. Challenges
 - ii. Successes
 - iii. Unexpected outcomes
 - d. Institutional
 - i. Challenges
 - ii. Successes
 - iii. Unexpected outcomes
 - iv. Role / views of the EA
 - v. Role / views of other FRM institutions
 - e. Social
 - i. Challenges
 - ii. Successes
 - iii. Unexpected outcomes

- f. Community engagement
 - i. Approach
 - ii. Challenges
 - iii. Successes
 - iv. Unexpected outcomes
 - g. Flood groups
4. Governance
- a. Partnership working
 - i. Positives – successes
 - ii. Negatives – problems
 - b. Will partnerships continue post-project?
 - i. Yes
 - ii. No
 - iii. Other
 - c. Any changes in personnel/partners?
 - d. Useful model for future use?
 - i. Yes
 - ii. No
 - iii. Other
5. Counterfactual
6. Legacy

Annex 10: DFID Model of Resilience

