



# Sustainable Flood Memories

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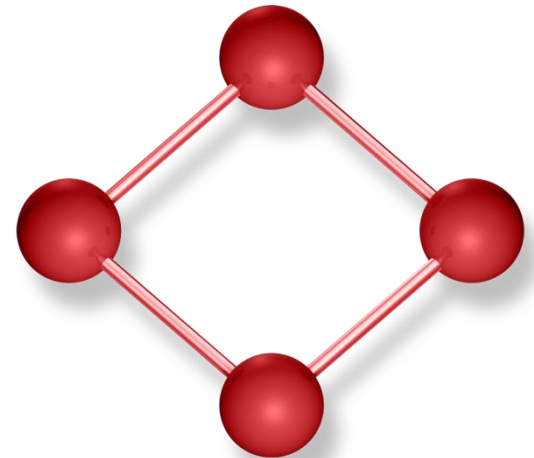


# Structure

- Centre for Floods, Communities and Resilience

## To share research from:

- ESRC *Sustainable Flood Memories* Project (February 2011-November 2013)
- ESRC *Knowledge Exchange* project (August 2013 – February 2015)



# Mission Statement - Centre for Floods, Communities and Resilience

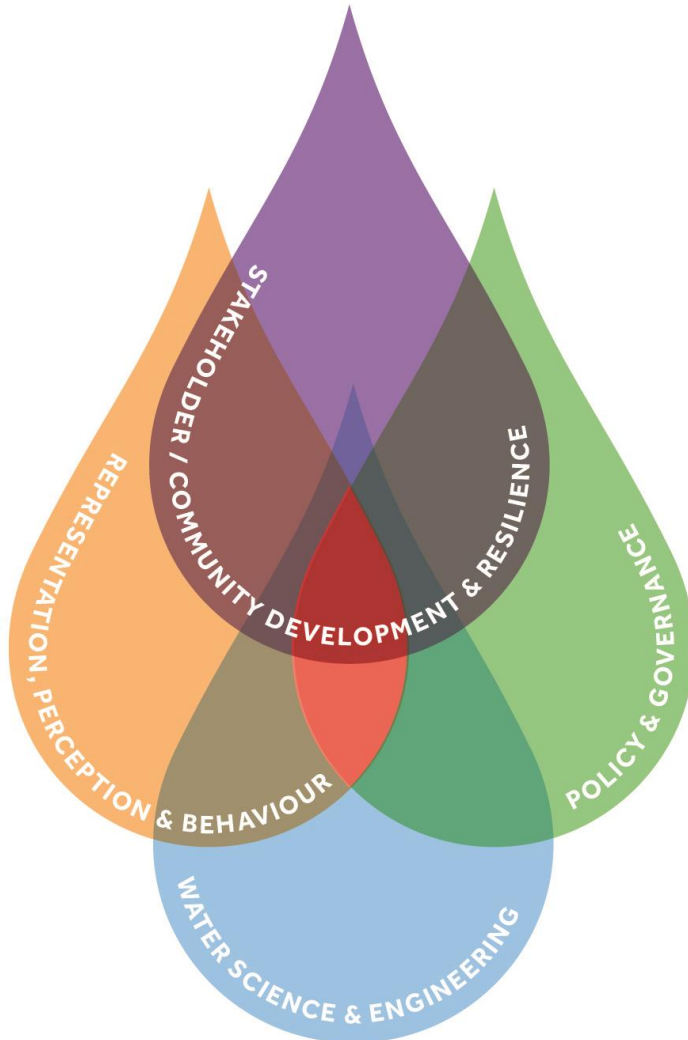


to promote resilient futures through a world class programme of interdisciplinary research on floods, communities and extreme weather



# Thematic areas

## Flood resilient futures



## Cross-cutting themes

- Scaling (up and down from 'local')
- Education
- Knowledges ('expert'/'lay/local'; integration)
- Communication (science)

Particular attention given to research explorations at the interstices



CFCR

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## Centre for Floods, Communities and Resilience (CFCR)



Related links

- > Department of Construction and Property
- > Department of Geography and Environmental Management
- > Faculty research

Contact CFCR

Postgraduate research study



The Centre for Floods, Communities and Resilience (CFCR) focusses on a range of flood specific themes reflecting the diversity and interdisciplinary nature of issues concerning the development of resilient communities.

About

About the CFCR's unique approach to flood research.

Publications

The list of publications produced by members of the CFCR.

Research areas

An overview of our key themes and research.

Research projects

CFCR's current portfolio of research projects.

CFCR people

The members of our research community.

News

For the latest news on CFCR.



[www.uwe.ac.uk/research/cfcr](http://www.uwe.ac.uk/research/cfcr)

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# Sustainable flood memories and the development of community resilience to future flood risk: a comparative study of four recently flooded communities

Different floodplain/community settings

Variable past flood experience

Established v. transitory residents

**Team:** Professor Lindsey McEwen (flood histories; FRM; flood education); Dr Joanne Garde-Hansen (media and memory); Professor Owain Jones (cultural geography); Dr Andrew Holmes (oral history); Dr Franz Krause (social anthropology)

# Sustainable Flood Memories (SFM) project: relationships between flood memories, lay knowledges and resilience



- how communities remember/ archive flood experiences
- how these memories are materialised, assimilated, embedded and protected in contemporary communities/culture
- how sustainable flood memories might have a particular role in developing community resilience to residual risk
- how communities themselves, and agencies\* charged with flood resilience planning, can engage with, and support, development of *sustainable flood memories*

**Evidence bases:** narratives, oral and archived histories, physical marks and material practices in the landscape, and folk memories of previous flood events and their impacts - embedded in local communities' heritage and culture.

# Human impacts of July 2007 floods, UK: direct and indirect costs

- Severn/ Sheffield/ Hull
- 12 people lost lives
- 48,000 houses + 7,000 businesses flooded
- Community disruption
  - Loss of business
  - Some residents in caravans for > 1 year
- 350,000 consumers in Gloucestershire without water supplies in late July
- Termed “the most severe UK peacetime crisis”





# 'Sustainable flood memory'

Exploring links between memory of extreme floods (collective, communal, archival) and lay/local flood knowledges:

- community focused
- archival access and dissemination
- integrating individual/personal and collective experiences
- involving inter- (vertical) and intra-generational (horizontal) communication
- strategies for capturing and protecting memory
- strategies for dealing with future flood risk



## FLOOD AND FUND FACTS

Highest level of Flood (at Gloucester Lock) 25 feet 4 inches.

Previous highest (since records were kept) 24 feet 11 inches (1852).

There were also Great Floods in October, 1483 ; December, 1672 ; and November, 1770 (computed to be the greatest ever known) ; February, 1795 ; and January, 1809 (both estimated greater than the 1947 Flood).

Total number of claimants for assistance, 1947, 1,268 (City, 706 ; County area, 562).

Total number of cheques drawn, 2,064 ("The Citizen" Fund, 1,033 ; the Lord Mayor of London's Fund, 1,031).

Total money received for relief purposes, "The Citizen" Fund, £21,163 16s. 6d. ; the Lord Mayor's Fund, £35,026 8s. 4d.

Amounts paid out, "The Citizen" Fund, the full amount received, the Lord Mayors' Fund, £32,571 13s. 1d. (the balance was returned).

Administration costs, £607 12s. 5d. (Less than one per cent.).

Emergency grants, £1816 12s. 4d. (clothing and houses).

# Emergent themes from individual interviews (68)

- Importance of emotion and affect
- Different/changing ways flood memory is materialised
- Childhood memories of 'living with water'
- Family and friend networks
- Active forgetting – for various reasons
- Active remembering – for various reasons
- Relationships with other agencies in flood risk management

Images with kind permission from participants – ESRC Sustainable Flood Memories project





# Flood marking as practice

Traditional

Formal/ informal

Persistence/ transiency

Relationship to active remembering and  
forgetting?



River Severn flood mark, porch to  
Tewkesbury Abbey, UK



Priory Farm, Deerhurst:  
Morris family has  
farmed here for  
generations



**Recording/remembering floods**



A

ER WOE: Restaurant manager Linda Richards (left) and pub manager James Cooper point marking flood levels — both past and present — at the Dog Inn at Over

### Shipshape at flood-hit pub

A plaque has been put up at the Dog Inn to mark the level of water which flooded the restaurant two weeks ago. 18 inches of water flooded the building and the bar for one while an aerial rain swept the whole county. It was one of the worst floods to hit the Dog Inn in years. The restaurant had to be closed for two days and the bar for one while an aerial rain swept the whole county. Three and a half feet of water flooded the building and the bar for one while an aerial rain swept the whole county.

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B



C

# River Sever: historic flood archives



E



D

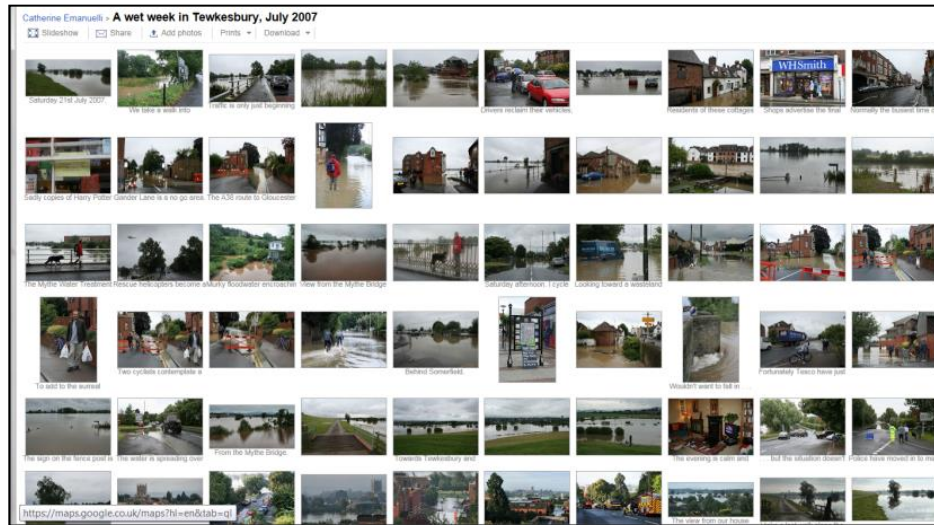
*'I think that there is great value in **re-telling the stories**, having the records. I just said to [husband] that, when we die, our kids are going to fight over these folders. You know, they think it's great. **And we didn't necessarily do these for posterity; I wanted to keep a record and, in order to show the Insurance Company what we did.** What better way than to flash these photographs! Because it shows we didn't sit back passively and let ourselves be flooded.'* (female, 64 years, rural setting 4)

# New community flood archives – post 2007

The image shows a screenshot of a Flickr search results page. At the top, the Flickr logo is visible with 'from YAHOO!' underneath. Navigation links include 'Home', 'The Tour', 'Sign Up', 'Explore', and 'Upload'. A search bar contains the text 'Tewkesbury 2007 floods' and a 'SEARCH' button. Below the search bar, there are options for 'Full Text | Tags Only' and 'Advanced Search'. The search results are displayed in a grid of 15 photo thumbnails. The first row shows a house, a flooded interior, a flooded street with a sign, a flooded road, and a flooded street with a car. The second row shows a flooded street, a flooded area with a fence, a flooded area with a car, a flooded area with a car, and a flooded area with a car. The third row shows a flooded area, a flooded area, a flooded area, a flooded area, and a flooded area. On the right side of the page, there is an 'ADVERTISEMENT' section with buttons for 'Homepage', '16 compatible matches', '3 new messages', and 'My profile'. Below the advertisement is a 'Sign-up now!' button for eHarmony.co.uk. At the bottom right, there is a 'Groups' section with two groups: 'Floods UK' (17 members | 811 photos) and 'UK Floods' (333 members | 3,235 photos).

***‘what is no longer archived in the same way is no longer lived in the same way’*** (Derrida 1996, p18)

(see McEwen et al. (2012) *Archiving flood memories of changing flood risk: interdisciplinary explorations around knowledge for resilience.*)



# New approaches to flood archiving (mobile, digital archives)

Ownership?

Democratisation?

Permanency and persistence?



# Memory and emotion

Whole ranges of emotions can be at work - **anger, fear, sadness, excitement, awe.....**

Memory and emotion are highly complex, entangled and uncertain.

For example, **a memory of a past flood event is often also a memory of emotion** (fear) and in remembering that event, the emotional response becomes active again.

# Active forgetting

What are characteristics of people who **do not want to remember?**

What are the implications for **adaptation and post-flood learning**, particularly when they are key players in communities?



# Active forgetting: emotion

Some people prefer not to remember the floods because they associate them with painful/ traumatic memories.

*'I think you've got to actually try and forget them cos **they were terrifying**. And if you try... If you think too much about it then you... I mean, obviously for two or three years after those floods **every bit of rain, every bit of flooding terrified some people**, absolutely terrified them. They thought that this was all going to happen again.'* (female, 76, Setting 2)

# Active forgetting: structures



What message is conveyed with flood alleviation works? ‘It will never happen again’ or ‘this is a flood risk area’?

*‘And then after that in the 1970s we put up the new defences and it was working extremely well. People got more confident and the Council said okay, and some of the semi-derelict houses were bought and completely rebuilt and that sort of thing. **So we were quite confident really.**’ (male, 75, rural Setting 4)*

# Active forgetting: economics

**BBC News: Tewkesbury residents  
concern over flood town reputation**

- Forgetting floods **to ignore flood risk?** (e.g. property value, insurance, developer's plans)
- Some communities prefer to forget (marks removed; 'back in business')

*'So I suppose we do our bit here, but I don't think the councils do enough to... You've got to go and interview them... **I don't think they do enough to remember do they? They want to choose to forget...**'*

(male, 34, Setting 2)

# Active forgetting: referral of responsibility for flood risk management?

***‘I think they shouldn't dwell too much on it. Okay, as I say, many people have done something about developing their houses better. But I just don't think they should dwell on it. Otherwise it's going to make life a misery. Quite honestly. Leave it to the authorities to try and be alert and aware of the possibility of a flood’.*** (female, 76, Setting 2)

# Active forgetting: flood fatigue

*‘I am not sure how I can help, except to put you in touch with the same people again and **they have now moved on. So has the City of course.** The [2012] high waters in the City did not cause the problems of 2007; the City was kept 'dry' due to the various flood protection initiatives taken by the water companies and Environment Agency since 2007 - **this has put the floods into even more distant memory.**’ (male, 65, Setting 3)*

# Active remembering

What are the characteristics of people who **want** to remember?

What are the implications for **adaptation and post-flood learning**, particularly when they are key players in communities?





# Active environmental remembering: lived experience of flood memory as anecdotal lay knowledge

*'And then the Sunday morning, I got up early and I could see the water was going to come in because at [ ] Lock there's measurements and if it's 23-feet which the normal river level is about 10'. **At 23 feet, it's going to come in the house.'***

*'**You do get warnings but I go by my own warnings;** by the lock, if it's 23-feet.'* (female, 79, Setting 3)



# Active remembering - flood memory as catalyst for local action



*'In my day, 40 years ago, we wanted to improve the flood banks then, and we had a sub-committee within the village that increased the height of the banks, with completely our own efforts really. [.....] After the 2007 flood it was realised by the village that the flood defences wanted making much higher and stronger. **So this sub-committee was formed of five of us I think, and we then started making plans to get grants.'***

(male, 75 yrs, Deerhurst)

# Active remembering – ‘taking responsibility’

*‘The EA want to take over the responsibility and we resisted that very vigorously really because we know when they [the flood gates] want closing .....And also the EA, once the floods do come they are so busy upstream getting various gates and things shut that I think it wouldn’t be a very reliable situation **so we’ve made it plain that we want responsibility to shut it.**’*

(male, 75, Setting 4)

# What are the tensions between active remembering and active forgetting?

- Relationships between remembering and forgetting flooding - **highly sensitive, contested + matter of local negotiation** for, and between, individuals, communities and agencies.
- **Strong flood memories were created, retained and shared** during our research, acting as vital knowledge (re)sources for community resilience.
- **Flood memory can be vulnerable to fading and forgetting**; changing neighbourhoods mean stories are not passed vertically through generations or horizontally across networks.
- **Forgetting may diminish resilient knowledges** and social learning that flood memories help develop.
- **Key tension between FRM governance to increase lay flood knowledges** in contexts where flood memory is 'hard to reach' or repressed (e.g. in settings without cumulative flood knowledges through repeated flooding).

Connerton's (2008) seven types of forgetting – incl. 'forgetting for annulment' and 'forgetting in the formation of a new identity'.

- Should certain aspects of forgetting be fostered for some individuals (e.g. from a public health perspective) but not for others (e.g. from flood education perspective)?
- Is it possible to 'forget' from an emotional perspective and still draw on critical resilience knowledges in future severe floods?



# New ways of flood archiving: ESRC Flood Memories digital storytelling project

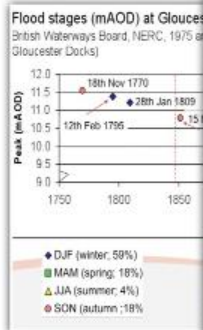
esrcfloodmemories.wordpress.com

Flood heritage:  
engaging with history



Flood plans:  
building our resilience

Flood data:  
understanding risk



Flood stories:  
exchanging learning



- Individual/collective
- Critical reflection
- Knowledge exchange
- Authorship/ anonymity
- Archive of 21 stories
- Evaluation in different settings

bettertogether

[Link](#) to UWE You tube page

# ESRC Sustainable Flood Memories project



## FLOOD MEMORIES

Does remembering previous floods make communities more resilient to future floods?

HOME / PROJECT DETAILS / PEOPLE / PROJECT OUTPUTS / KNOWLEDGE EXCHANGE / DIGITAL STORIES / LINKS

- Website: [esrcfloodmemories.wordpress.com](https://esrcfloodmemories.wordpress.com)
- Project blog: [www.floodmemories.wordpress.com](http://www.floodmemories.wordpress.com)
- Twitter: <https://twitter.com/floodmemories>

# References

- Cabinet Office (2008) *The Pitt Review: Lessons learned from the 2007 floods* (<http://www.cabinetoffice.gov.uk/thepittreview.aspx>) Accessed 1 May 2013.
- Connerton P. (2008) Seven types of forgetting *Memory Studies* 1 59-71.
- Derrida, J. (1996) *Archive Fever: A Freudian Impression*. Chicago: University of Chicago Press. Translated by Eric Prenowitz. 113pp.
- ESRC Sustainable Flood Memories project ([esrcfloodmemories.wordpress.com](http://esrcfloodmemories.wordpress.com))
- Garde-Hansen, J., McEwen, L. J., Holmes, A. and Jones, O. (in press) Sustainable Flood Memory: Remembering as Resilience. *Memory Studies*
- McEwen, L. J., Garde-Hansen, J., Holmes, A., Jones, O. and Krause, F. (in review) Sustainable Flood Memories, Lay knowledges and the Development of Community Resilience to Future Flood Risk. *Transactions of the Institute of British Geographers*.
- McEwen, L. J., Reeves, D., Brice, J., Meadley, F. K., Lewis, K. and Macdonald, N. (2012) Archiving flood memories of changing flood risk: interdisciplinary explorations around knowledge for resilience. *Journal of Arts and Communities* 4, 46-75.