What is going wrong with community engagement? How flood communities and flood authorities construct engagement and partnership working

What is going wrong with community engagement? How flood communities and flood authorities construct engagement and partnership working

P. Mehring[1,3*], H. Geoghegan[1], H. L. Cloke[1,2,4,5], J. M. Clark[1]

1. Department of Archaeology, Geography & Environmental Science, University of Reading, Reading, UK

2. Department of Meteorology, University of Reading, Reading, UK

3. National Flood Forum, Bewdley, Worcestershire

4. Department of Earth Sciences, Uppsala University, Uppsala, Sweden.

5. Centre of Natural Hazards and Disaster Science, Uppsala, Sweden

***Corresponding author: P. Mehring - (phiala.mehring@pgr.reading.ac.uk)**

Highlights

- The impact of historical technocratic constructions of flood defence on contemporary flood risk management.
- How one size fits all engagement processes fail to appreciate the heterogenous nature of flood communities, where 'collaborative', 'contractual' and 'hybrid' constructions of community exist.
- The importance of equitable ways of working in the establishment of partnerships within flood risk management.
- How knowledge hierarchies negatively affect partnership working and flood communities.

Abstract

In this paper, we discuss the need for flood risk management in England that engages stakeholders with flooding and its management processes, including knowledge gathering, planning and decision-

making. By comparing and contrasting how flood communities experience 'community engagement' and 'partnership working', through the medium of an online questionnaire, with the process's and ways of working that the Environment Agency use when 'working with others', we demonstrate that flood risk management is caught up in technocratic ways of working derived from long-standing historical practices of defending agricultural land from water. Despite the desire to move towards more democratised ways of working which enable an integrated approach to managing flood risk, the technocratic framing still pervades contemporary flood risk management. We establish that this can disconnect society from flooding and negatively impacts the implementation of more participatory approaches designed to engage flood communities in partnership working.

Through the research in this paper it becomes clear that adopting a stepwise, one-size-fits-all approach to engagement fails to recognise that communities are heterogenous and that good engagement requires gaining an understanding of the social dimensions of a community. Successful engagement takes time, effort and the establishment of trust and utilises social learning and pooling of knowledge to create a better understanding of flooding, and that this can lead to increasing societal connectivity to flooding and its impacts.

Keywords: community engagement, partnership working, knowledge hierarchies, trust, flood communities, and flood authorities

1.0 Introduction

Flooding is a multi-dimensional systemic risk (Renn et al., 2011) embedded in other societal processes (Evers et al., 2016) such as transport, health, education, food production, drinking water provision, ecosystem services and so on. It is fraught with uncertainty and ambiguity (Renn et al., 2011; Aronica et al., 2013) which necessitates a holistic, that is an integrated approach, to ensure that all elements of the risk are managed as effectively and efficiently as possible. For flood risk management to be

deemed successful it also needs to include increasing societal awareness of, and preparedness for, flooding alongside helping society to build greater resilience to flooding (Geaves and Penning-Rowsell, 2015). It is through engaging society with managing flooding that these outcomes can be attained.

In this paper we discuss the need for flood risk management ways of working that engage stakeholders through partnership working, including knowledge gathering, planning and decision-making. However, we demonstrate that the terms 'engagement' and 'partnership working' are themselves fraught with uncertainty and ambiguity and are constructed differently by the various stakeholders of flood risk management. We seek to understand these different constructions and provide a more united framing of engagement and partnership working which can then be embedded into both policy and practice through a combination of top down and bottom up processes.

By comparing and contrasting the experiences of flood communities being 'engaged' by the flood authorities with the approaches that the Environment Agency use when 'working with others', we gain an understanding of how flood risk management has come to be framed within a technocratic paradigm. We then move on to examine why a more democratic paradigm is critical to the engagement of communities and the development of partnership working.

We finish by unpacking the problems encountered when endeavouring to adopt more democratised ways of working: the impact that knowledge hierarchies have on flood communities; the problems associated with adopting a stepwise, one-size-fits-all process to engagement; and the consequences of not taking the necessary time to build the trust required to make partnership working successful.

1.1. The reframing of flood risk management: from a technocratic to democratic paradigm

For centuries, humans have fought to reclaim land from the control of water. Protecting lowlands with river embankments, drying out potential farmland via field drainage and creating vast networks

of drains to enable wetlands to become viable for agriculture (Werritty, 2006; Scrase and Sheate, 2005). Land reclamation was a battle between land owners and water, to defend the soils and turn them into productive food generating landscapes (Purseglove, 2015) and feed an ever-growing population. Managing water was set in a paradigm of technocratic flood defence.

The advent of World War 2 necessitated the UK to become more self-sufficient in the production of food (Tunstall et al., 2004). This led to intensification in agricultural production and further changes to the flood landscape through modification of land management practices, increasing land drainage and more reclamation of land from the waters (O'Connell et al., 2007; Wheater and Evans, 2009; Marshall et al., 2014). This all bolstered the framing of a defensive approach to managing flooding achieved by utilising a centralist and technocratic approach with limited input from the public. Such an approach failed to accommodate the opinions of the communities it impacted nor their historic use of the land (Purseglove, 2015).

The practice of protecting agricultural land through flood defence continued until a series of flood events in the late 1940s and early 1950s challenged the premise of what should be defended. Flooding in the Fens in 1947 (Wainwright, 2007), in Lynmouth in 1952 (McGinnigle, 2002; Hill, 2015) and severe coastal flooding in 1953 (killing over 300 people) (Scrase and Sheate, 2005; Lumbroso and Vinet, 2011) initiated the reframing of flood defence; from defending agricultural land to defending property and keeping people safe (Donaldson et al., 2013; Nye, 2011). This reactive reframing (Tunstall et al., 2004) did not, however, alter the underlying paradigm of flood defence. If anything, it strengthened the centralist and technocratic 'flood defence' response.

Flood defence became predicated on the institutional construction of hard engineering solutions designed to defend towns and cities against the rising flood waters. This 'defence' was framed in terms of 'sovereignty' (Donaldson et al., 2013) where government determines flood risk management policy

and approach and what constitutes 'public good' in the face of flooding. This approach effectively removes society from flooding. It abstracts communities and other stakeholders from the actions taken towards managing flood risk (Tapsell et al., 2002) and protecting their homes and livelihoods. Those living at risk of flooding became, in essence, passive observers, with flood risk authorities acting on their behalf.

The 1980's and 1990's saw the beginning in a shift away from the paradigm of flood defence moving towards one of flood risk management (McEwen et al., 2017). The emphasis on protecting urban environments was further increased as over production of food and increased access to global markets (Tunstall et al., 2004) reduced the perception of the need to defend agricultural land from flood waters. Increased computer power, advancing models and the beginnings of the understanding of the impact that flood defence techniques had on the environment all led to seeking a more integrated approach to flood risk management. Embedded within this new paradigm was the requirement for society to take responsibility for managing individual flood exposure, for example, creating flood plans or making homes more flood resistant and resilient. Flood communities were no longer to be abstracted from managing flooding but rather abruptly immersed into the process. Thus 'community engagement' started to play an important role within flood risk management.

In 2004, echoing the Netherlands's approach of '*Room for the Rivers*' (Netherlands, 2012), Defra published '*Making Space for Water'* (Defra, 2004) which further developed the concept of flood risk management. The challenge now faced by the flood authorities in England was to move their approach to managing flooding away from historic technocratic and top down ways of working, arising from taking a flood defence approach, towards more inclusive democratised approaches (McDaniels et al., 1999). 'Engaging the community into the decisions made about managing flooding' was the objective (Landström et al., 2011), and this tended to play out as the flood authorities endeavouring to make communities make themselves more resistant and resilient to flooding. Through taking a top

129 down approach deployed without using two-way communication there could be little understanding
130 of what 'engaging the community into the decisions' meant to 'the community'.
131
132 **1.2 Moving towards 'good' engagement: effective flood risk management**
133 We acknowledged earlier that flooding is a systemic risk embedded within society (Ortwin Renn, 2011;
134 McDaniels et al., 1999), it is a wicked problem (Horst and Webber, 1973). Managing such a complex
135 problem necessitates the generation of an exhaustive understanding of the sources, pathways,
136 impacts and societal elements of flooding, in order to generate an understanding of what solutions
137 could be developed to address it. Participatory processes and partnership working can create the
138 environment in which this exhaustive understanding can be developed. It is through combining
139 different domains of knowledge and through alterations to decision-making processes using
140 collaborative approaches (Löschner et al., 2016), that flood partnerships have the potential to create
141 more effective flood risk management responses. Engaging all flood stakeholders creates a degree of
142 knowledge overlap which strengthens the process potentially yielding more impactful outputs
143 (Löschner et al., 2016).
144
145 The realisation of co-creating flood risk management solutions ultimately depends on the capacity of
146 the different actors and groups involved in partnership working to communicate, learn, negotiate and
147 reach collective decisions (Muro and Jeffrey, 2008). This is initiated by the development of a shared
148 understanding of the local flooding situation through combining knowledge and experience which
149 ultimately can lead to enhanced connectivity with flooding and the creation of the resilience and
150 resistance that society requires to withstand it (Frijns et al., 2013). This is a form of social learning
151 and is being increasingly used in environmental problem solving (Johansson et al., 2013). Here social
152 learning is centred on developing relationships and trust, both of which take time and perseverance
153 (Johansson et al., 2013).
154

155 The move towards more democratised ways of working has been stilted by the tendency to hold onto
156 old ways of working, with the paradigm of a technocratic response retaining the psychological upper
157 hand as evidenced in this research. When engagement is set in the shadow of technocratic ways of
158 working, 'being heard' becomes a central problem for flood communities (Thaler and Levin-Keitel,
159 2016). A frequently heard lament at flood group conferences, workshops and forums and within this
160 research is that flood risk management continues to be something that is being "done" to flood com-
161 munities rather than "with" them [respondent:115]. This lament is set against changes in the way the
162 flood authorities work. For example, the Environment Agency has recently employed a number of
163 Engagement Officers. Whilst the flood authorities are endeavouring to engage the community, com-
164 munities fail to see these activities as them 'being engaged'. Within this paper we argue that the
165 constructions of 'engagement' differs between flood communities and flood authorities create this
166 discord.
167
168 **1.3 Moving towards 'good' engagement: appreciating that communities are heterogenous**
169 Having established that good community engagement is beneficial to all flood risk management stake-
170 holders and to the processes of managing flooding, we now turn our attention to what is 'good' en-
171 gagement. There are many facets to what constitutes 'good' engagement and many are dependent
172 on how individual flood communities are constructed. Community construction is defined by the di-
173 verse characteristics of people, place (MacQueen et al., 2001) and experience. Communities are het-
174 erogeneous (Dempsey, 2010) and failure to appreciate this complexity when 'engaging' with a com-
175 munity will result in engagement processes which are, at best, challenging, and at worst, create a
176 breakdown in communication and relationships (Barnes and Schmitz, 2016). The notion of social cap-
177 ital is useful for making sense of a community's potential response to 'engagement'. Putnam (2001),
178 in his book about the decline of social capital in the US (Bowling Alone), defines social capital as the
179 connections amongst individuals, their social networks and the reciprocity and trustworthiness that
180 results from these connections. The social capital held within a group has a marked impact on the

construction of that group (Putnam, 2001). A flood community with strong social capital will respond to a flood event differently compared to a community with little or no social capital. Strong social capital (Kuhlicke et al., 2011) generates a positive response to a negative external stressor such as flooding and can provide the skills and resources to enable at-risk communities to anticipate, respond to, cope with, recover from and adapt to, the external stressor. It is highly improbable that engagement advances by flood authorities which do not appreciate these skills, nor understand a community's connectivity to flooding will be successful.

However, social capital is not static, it is not an unchanging force within a community. Good engagement which utilises social learning through participatory ways of working can develop and strengthen social capital (Frijns et al., 2013). Good engagement should not only aspire to developing good relationships with 'the community', it should aim to use social learning to co-create knowledge, enhance social capital and increase the resilience of society towards flooding.

2. Research questions, methods and analysis approach

Research is never without a context nor is value free (Rose 1997), as such it is important to acknowledge the social identity and situated knowledge of one of our authors who has lived at risk of flooding. This experience which, includes their journey starting a flood group which demanded that the flood authorities 'do their job' and stop flooding, through to the realisation that flood risk is complicated and therefore requires all stakeholders, including communities, to work together, informs this research. Through the author's work as a Trustee of the National Flood Forum, it has been impossible to silence the voices and experiences of other flood groups which echo many of the challenges and opportunities that the author has encountered personally. Additionally, much of the research conducted in this area has been conducted by 'outside' observers, where researchers work with communities as neutral participants to facilitate understanding of the human impacts of living at

risk of flooding. The research within this paper utilises the positionality of the author and acknowledges potential constructions of 'them and us' between researcher and the researched and builds on a more pluralistic sense of 'we' through shared lived experiences. Where themes embedded in respondent's words and phrases resonate directly with personal experience, and where the challenges and triumphs of battling '*to get something done*' can are viewed through the lens of experiential knowledge. These lived observations have motivated this academic research project at the University of Reading that investigates the following three questions which frame the research within this paper:

- How do flood communities construct 'engagement' and 'partnership working'?
- How does the Environment Agency construct 'engagement' and 'partnership working'?
- How can these constructions be aligned to improve community engagement and partnership working?

It is through facing some of the challenges that the author first came across the Environment Agency's internal 'working with others' guidance document and began to appreciate the dichotomy between the construction of engagement as experienced by flood communities, with the construction of engagement within the Environment Agency's guidance document.

In what follows, we compare and contrast how flood communities experience community engagement and partnership working through the medium of an online questionnaire, with the process's and ways of working that the Environment Agency use when 'working with others'.

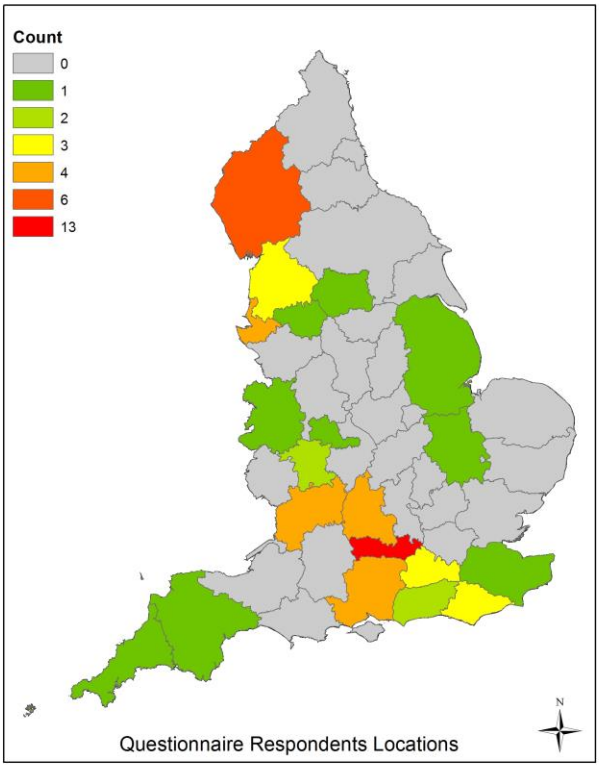
The online questionnaire consisted of 13 questions ranging from understanding how those living at risk of flooding thought flood risk was managed and separately how it should be managed, whether the flood authorities that manage flooding showed good leadership and whether flood communities should be involved in flood risk management. The questions generally followed the format of an initial

closed question requiring a ‘yes’ or ‘no’ response followed by an open-ended probe ‘why do you say that?’.

The questionnaire targeted individuals living at-risk of flooding and local/national flood groups. 62 people responded to the questionnaire and 10 responded to additional questions. The on-line survey was distributed through social media and emails from the National Flood Forum to their 300+ affiliated groups with additional support through social media by the Environment Agency. Participants were self-selecting.

57 of the 62 respondents either represented flood groups or were individuals who had experienced flooding. The remaining five were either flood wardens or councillors representing those living at risk of flooding with one respondent representing the Environment Agency. From the community-based respondents, one had not flooded but was aware that their home had flooded before they moved in. One individual had not flooded but neighbouring properties had. 10 additional respondents had also not experienced internal flooding but had been impacted by gardens, local roads and other infrastructure, for example schools, being flooded. 15 respondents had suffered flooding on one occasion, 11 on two occasions and 19 on three or more occasions. Responses were geographically spread across England.

Diagram 1: the locations of respondents to the questionnaire: red areas with 12 respondents, dark orange – 6, light orange – 4, yellow – 3, light green – 2 and dark green – 1.



Documentary analysis was conducted on the Environment Agency's internal training guide 'Working with Others' (EA, 2015). The document is designed to facilitate the Environment Agency in their endeavours to implement good stakeholder engagement. The guide structures engagement around the process of 'think, plan, prepare'. It starts with an introduction by James Bevan, Chief Executive of the Environment Agency before taking Environment Agency staff through a step by step approach for 'working with others'. Access to this document was granted by the Environment Agency's Deputy Director.

2.1 Analysis

Thematic analysis was used to understand and interpret both the information gathered in the on-line questionnaire and the Environment Agency's 'working with others' document. This thematic analysis took an inductive hermeneutic approach (Kitchin and Tate, 2000) to interpreting the themes within both sources of information which identify how the EA and those living at risk of flooding construct partnership working and community engagement. This hermeneutical approach enabled the layering

of meaning, to understand sense and themes both within the sections/sentences they are located within and with the information as a whole.

The above analytic procedure entailed finding, selecting, appraising (making sense of), and synthesising (Bowen, 2009) of the information contained in the EA' document and the responses to the questionnaire. Care was taken to avoid identifying themes purely based on frequency of use as the style of responses or of the writer(s) of the Environment Agency's documents (Vaismoradi et al., 2013), could affect frequency of mention. The importance of a theme was therefore based on the research questions.

3. Results and discussion

3.1 Do flood communities believe they should be involved in flood risk management?

Before we move to discuss the construction of engagement and partnership working, we need to understand whether flood communities and individuals within this research actually seek to be involved in the processes of flood risk management. The respondents to the questionnaire were asked directly, 'Should communities, residents groups and residents be involved in managing flooding?'. 95% of the respondents replied 'yes'.

What does 'involved' mean? There is a clear appreciation that local experiential knowledge is important if not vital to effective flood risk management:

> *Only (named flood group) have the knowledge, experience and expertise to promote flood alleviation[respondent:117].*

> *From personal experience. No-one knows more about the effects of flooding than those directly affected[respondent:112].*

293

294 *There is a wealth of local understanding that can be used[respondent:120]*

295

296 *Local residents often have far more knowledge of local problems than the authorities, which*
297 *can be extremely useful. XX Council and the relevant authorities are keen to tap into this*
298 *knowledge following discussions with residents. I think they have been very impressed with the*
299 *level of knowledge some of the older residents have from living in the area for a life time[re-*
300 *spondent:113].*

301

302 It is also interesting to note that many respondents constructed 'be involved' around the idea of con-
303 tributing their knowledge to the greater understanding of how and why local flooding happens. Some
304 respondents went as far as to say that 'be involved' should be framed around being consultants;

305

306 *Yes but only as consultants[respondent:33]*

307

308 *In an advisory capacity. Local residents often have far more knowledge of local problems than*
309 *the authorities, which can be extremely useful[respondent:113]*

310

311 Or as being the co-ordinators of flood risk management;

312

313 *Exploit vernacular knowledge - hold agencies to account - fill co-ordination gaps[respond-*
314 *ent:130]*

315

316 There was also an understanding that the inclusion of lay knowledge into the processes of flood risk
317 management will facilitate the acceptance of the resultant decisions;

318

319 *Otherwise the solution will not engage them, it may not be right or meet their local needs and*
320 *they will feel that something is being "done" to them rather than with them, people need to*
321 *feel listened to[respondent:115]*
322
323 *They have vital local knowledge of the how and where local flooding occurs. You need the*
324 *community to 'buy in" to the risk management so that they will take steps to improve their*
325 *own property protection too[respondent:104].*
326
327 The over-riding theme across the responses was the desire to be involved, with the underlying under-
328 standing that this was the only way of getting things done.
329
330 ***3.2 Engagement and heterogenous communities***
331 Whilst the majority of respondents in this research felt that they should be involved in flood risk man-
332 agement, the perception of how this should happen varied. This research and others (Geaves and
333 Penning-Rowsell, 2015) found that some people and groups were galvanised by a flood event, or near
334 misses, into taking action whilst others seek to find a cause to blame and have corrected by others,
335 for example some respondents identified:
336
337 '*Improve and update the drainage'[respondent:131/9]*,
338 '*Flood relief Chanel should be extended….'[respondent:121/9],*
339 *'get the rivers more capacity'[respondent:139/9]*,
340
341 The 'galvanised' groups would often try to initiate partnership working with the flood authorities,
342 seeking collaborative ways of working to develop flood risk management solutions:
343

344 '*It* (the flood group) *was a very much a clear example of the community group driving the*
345 *agencies forward and not vice versa'[respondent:m7/5].*
346
347 *'From there* (forming the flood group*) we got to know the EA people. Things continued with*
348 *more frequent contacts and building relationships'[respondent:p9/1]*.
349
350 Whilst those seeking someone to implement corrective actions often simply want the authorities to
351 do what they think needs to happen:
352
353 '*Construct a bypass channel to direct flow around mill sluice'[respondent:101/9]*.
354
355 *'To upgrade the village surface water system and the sewerage system, which were probably*
356 *installed in the 1950's, to make them able to cope with a future ground water flooding*
357 *event[respondent111]*
358
359 This framing displays 'contractual' (Geaves and Penning-Rowsell, 2015) elements where communities
360 expect a level of protection provided by the authorities. These constructions are, however, not static.
361 Flood communities can start with a contractual view of flood risk management and, over time, as they
362 become reconnected to flooding and the processes of flood risk management migrate towards more
363 collaborative constructions, thus creating hybrid flood communities. These hybrid flood communities
364 often blend collaborative and contractual framings of flood risk management, such as;
365
366 '*Engage with the community and commit to a holistic long-term plan to correct the poor in-*
367 *frastructure and plan for the future'[respondent:112/9].*
368

Often starting by erring more towards a contractual stance before moving to more collaborative ways of working. This transition can only come through reconnection to flooding, whether that be communities themselves using their experience to better understand flood risk or through engagement with the flood authorities. This is a reflection of the advantages discussed above where social learning develops knowledge and understanding, thus increasing social capital and increasing societal resilience to flooding.

'Collaborative', 'contractual' and 'hybrid' flood communities require different forms of engagement by the flood authorities. The approaches made to the collaborative groups, seeking equitable partnership working, will fall flat if offered to the contractual groups, who are seeking readymade solutions. On the other hand approaching a collaborative group with a readymade solution will be seen as stealth issue advocacy (Thaler and Levin-Keitel, 2016) and will result in a breakdown in trust creating fault lines (Löschner et al., 2016) within the fledgling partnership. The hybrid groups, seeking a blend of collaboration and contractual responses, pose yet more complications in determining the form that engagement should take. It is clear, flood authority engagement with flood communities can not only come in one size and shape. It can't be a tick box process; one size does not fit all (Nye, 2011).

These differing constructions of flood communities – collaborative, contractual and hybrid – echo the paradigms in which flood risk management has been framed over time. The contractual groups are responding to the historically technocratic response to flood risk management where top down solutions are expected if not demanded. Whilst the collaborative groups are preferring a much more democratised framing of flood risk management where engagement and partnership working are vital.

These technocratic and democratic paradigms are also found within the Environment Agency's 'Working with Others' guide. This guide is clear in understanding that partnership working necessitates the

Environment Agency being '*a trusted and valued partner'[EA:8]'.* However, this democratised view of engagement and partnership working quickly shifts to a more traditional technocratic paradigm '*in most cases we still make the final decision, but we will have worked with others throughout to ensure such decisions are as widely supported as possible'*[EA:27]. Here the goal of engagement is attaining acceptance of decisions apparently made without the inclusion of other stakeholders. Trust is being sought in the decisions not in the relationships required to work in collaborative ways and co-create decisions. There is no acknowledgement that other ways of knowing flooding may enhance the approaches made to manage flooding.

The guide breaks down engagement into a step-by-step process designed to 'fit all' stakeholders and communities:

step *1: 'what do we want to achieve?'[EA:41],*

step 2: 'why work with others'[EA:75],

step 3: '*how do we need to work with*'[EA:118], and

step 4: 'how do we work with others?'[EA:154].

It includes deciding what *type of engagement to use[EA:162]*. This process homogenises the construction of community (Scott, 2008) thus enabling engagement to be delivered through the steps laid out. Starting the 'process' with '*what do we want to achieve'* immediately excludes the very communities and their ambitions, that the guide appears to aim to engage. Here 'we' is being constructed as the Environment Agency and this construction is embedded within the other steps, introverting them into decisions made behind closed doors. This is experienced by flood communities as the Environment Agency 'coming in' with predetermined plans and decisions. The construction of engagement appears to centred around seeking approval for the decisions made by the Environment Agency.

421 It appears flood communities are not heard until the Environment Agency seek to '*refine them* [objec-
422 tives] *when we know more about who our stakeholders are (step three) and what they are seeking to*
423 *achieve'*[EA:76]. There is potential for this guide to be developed to open 'we' up into a more plural-
424 istic 'us', whereby developing relationship necessitates making space for listening, learning and think-
425 ing, and making time for working together. Making space for partnership working will build trust and
426 lead to more productive democratised ways of working; working together will create stronger and
427 better solutions. This construction of partnership working is more aligned with how flood communi-
428 ties construct it.
429
430 ***3.3 Equitable partnerships: Rebalancing technical knowledge hierarchies***
431 Being a 'wicked' problem, effective flood risk management necessitates the inclusion of the societal
432 ways of knowing flooding. Where community knowledge is regarded as not being as valid or robust
433 in comparison to the priori knowledge of the flood authorities (Whitman et al., 2015) knowledge hi-
434 erarchies are created and these are commonly encountered by the flood communities within this re-
435 search. As discussed above, flood communities are very aware that the knowledge they hold is im-
436 portant when trying to manage flood risk, but that it is often not viewed this way by the flood author-
437 ities.
438
439 *'We are extremely knowledgeable about flooding in the local area. Why not consult us and use*
440 *our expertise?…….Some of the villagers have lived through flooding since they were children*
441 *and need to be listened to''[respondent:138/12b].*
442
443 Communities have both experiential and intergenerational knowledge and often many photographs
444 showing how their locality floods (Garde-Hansen et al., 2017; McEwen et al., 2017). At the very least,
445 these could be used to ground truth models and provide invaluable additional knowledge about the
446 sources, pathways and impacts of flooding. In Lane et al.'s(2011) research on doing flood research

447 differently, the team witnessed how strong hierarchies of knowledge driven by top down and techno-
448 cratic ways of working led to a general breakdown in collaborative working with a negative impact on
449 trust. When knowledge hierarchies come into play, where organisations or individuals perceive and
450 behave as if their knowledge is more important or valid, barriers are created between flood authorities
451 and 'lay people' (Brace and Geoghegan, 2011). These barriers will inhibit community engagement and
452 partnership working (Vasilachis de Gialdino, 2009)
453
454 Many of the flood communities are demanding a more nuanced approach to decision-making,
455 whereby their ways of knowing flooding are taken into consideration. Such groups regard equality and
456 equity in knowledge-production and gathering as a key mechanism for building trust with flood au-
457 thorities and for creating more robust partnerships:
458
459 '*Residents groups/ Flood Groups should be at the heart of managing flood risk'[respond-*
460 *ent110/12b].*
461
462 The technocratic framing of engagement in the Environment Agency's 'Working with Others' guide is
463 fraught with knowledge and power hierarchies, where support for their decisions is sought:
464
465 *In most cases we still make the final decision, but we will have worked with others throughout*
466 *to ensure such decisions are as widely supported as possible*'[EA:27].
467
468 Other ways of knowing are framed as '*concerns, interests and priorities'[EA:27]* which are to be 'un-
469 derstood' rather than used to co-produce solutions or to develop collaborative ways of working. The
470 goal is to attain wide support for Environment Agency decisions. This form of framing is experienced
471 and expressed by communities as '*not being listened too*'[respondent:131/12b], because they cannot
472 see their knowledge and ambitions reflected in the plans developed. Flood communities' knowledge

does not readily fit into a technocratic framing were knowledge is imparted in a top down fashion with no room for questioning or challenging it.

The old technocratic ways of working drive knowledge and power hierarchies (Thaler and Levin-Keitel, 2016) and this paradigm is evident within the 'Working with Others' document. As a result, community engagement is constructed as a means to an end in order to gain support for flood authority action, rather than developing an on-going relationships and achieving more sustainable outcomes (Barnes and Schmitz, 2016).

3.4 Building participatory partnerships

In an attempt to surmount these barriers some flood communities talk about an approach of constructive attrition, cajoling and almost wooing the flood authorities into working in partnership with them. Communities try to convince their prospective partners that they are worth engaging with:

> '*Once they realised we were not a bunch of angry troublemakers the authorities have welcomed us*'*[respondent:P9/3].*

> *I have been flooded 4 times and the last time is the first time they have listened to me[respondent:109]*

The experience of one of the authors when setting up a flood group is similar, the group decided early on that using polite construction attrition in order to gain traction in engaging with the flood authorities and as a group pursued this approach relentlessly. We fought hard to 'be heard'. Likewise, the objective for the flood communities featured in our research is to move from one-way wooing to two-way communication and the development of constructive and productive partnerships.

498 This appreciation of partnership working as an equitable two-way process can be seen in the literature
499 (Whitman et al., 2015; Soetanto et al., 2016). It isn't an easy option as witnessed above. There are
500 frequent difficulties in relations between the perceived 'experts' and the 'lay' communities (Evers et
501 al., 2016; Entwistle et al., 2007) and establishing sound workable relationships takes time and effort.
502
503 The Environment Agency 'Working with Others' guide urges its staff to consider the amount of time
504 that collaborative ways of working take to implement and that limited resources mean they cannot
505 be in all places at all times:
506
507 '…. *we need to be proportionate in deciding when and how we engage. We cannot talk to*
508 *everyone about everything we do'[EA:32}*.
509
510 In this context, the need for 'wooing' and 'cajoling' to gain the attention of the Environment Agency
511 is readily understood. Collaborative flood communities need to 'catch the eye' of the Environment
512 Agency in order to initiate the setting up of equitable partnerships.
513
514 **4. Conclusion: moving forward**
515 The prevailing winds of a technocratic paradigm in flood risk management are hard to dispel. Flood
516 authorities appear to remain held within the grip of top down centralist decision-making. Indeed,
517 some flood communities continue to frame flood risk management through the lens of technocratic
518 ways of working. They perceive there is a 'contractual' relationship with the 'powers that be' to stop
519 flooding (Geaves and Penning-Rowsell, 2015). Whilst other flood communities take a more
520 democratised view of flood risk management, seeking more collaborative approaches to managing
521 flooding. However, taking this approach often results in those flood communities encountering a
522 series of barriers when endeavouring to engage the flood authorities. Battling for the often-singular
523 construction of 'we' to be a more pluralistic construction of 'we' and 'us all', pushing to be heard and

working towards their knowledge and experiences becoming part of flood risk management. Polite and constructive attrition is often the best approach for such flood communities, but it requires sustained commitment.

Technocratic ways of working utilised by flood authorities continue to frame the construction of engagement and hence partnership working, and these inhibit the utilisation of social learning and miss opportunities to increase societal resilience to flooding. As our research has revealed engaging a community is not a tick box process which can have set steps to be checked off a list. A one-size-fits-all approach fails to recognise the heterogenous nature of flood communities. If engagement is to be achieved rather than something that has to be delivered (Barnes and Schmitz, 2016), it requires gaining an understanding of the social dimensions of a community (Colvin et al., 2016). Engagement becomes a continuous activity which takes time, effort and the establishment of trust and utilises social learning contextualised in place through participatory working.

We therefore recommend that strategies and guides produced by flood authorities, such as The Environment Agency's 'Working with Others' document discussed here, should steer staff towards initiating engagement with flood communities by adopting a more open and collaborative stance. Such tactics might involve simply listening to the community, hearing about their experiences, acquiring their knowledge, learning about their fears and understanding their ideas. Reflexivity must also be embedded into these approaches were flood authorities reflect on their ways of working as an ongoing process. Within this paper we have spoken about the social capital of communities, flood authorities would do well to reflect upon the social capital held within their organisations and how social learning through partnership working could augment and develop this capital. Flood authorities would also do well to appreciate that just like communities they are heterogeneous and as a one size fits all approach fails to address the various constructions of communities, it also fails to understand the differences in the people who apply these fixed processes.

Our research has identified a gap in the research literature, whilst there is a good body of work seeking to understand how flood memory can be utilised to increase societal resilience to flooding, there is a little understanding of the tools and ways of working that flood authorities need to facilitate engaging and working with flood communities.

Flooding is a systemic 'wicked' problem, and its management requires a holistic approach. If top down ways of working and technocratic framings of flood risk management continue to prevail, flood authorities and other policy stakeholders are in potential danger of abstracting communities and their knowledge from flood risk management. With a dearth of research expertise about the depth and breadth of good flood risk management engagement approaches, this research suggests that just listening to and talking with a community is an excellent start point to engaging with a community. Opportunities to develop ways of working also lie outside the immediate field of flood risk management. Engaging with other areas and learning from their experiences may provide additional resources to facilitate the move to more democratised ways of working.

As a society facing the threat of increasing flooding, both flood communities and authorities need to adopt more democratised ways of working. They need to work together to manage flooding and its human impacts, with researchers continuing to offer a critical perspective as that relationship develops.

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