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## **Propagating the aftermath: the Cumbrian experience of using a community development approach to build resilience to flooding**

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### **Abstract**

In the disasters literature, *aftermath* is used to denote the predominantly negative consequences of a hazard event. Yet in old English the same term is used to describe the green shoots that emerge from a grass field after it is cut. Applying this second, more positive and more resilience-relevant framing to hazard consequences, this paper focuses on a specific finding from the case study's urban areas to illustrate the importance of 'social protectors' in facilitating affected communities' 'green-shoot' aftermath processes.

Following the 2009 flood Cumbria's Local Resilience Forum (LRF) recognised the vitality of their County Council partner's community-based, *social* protection focussed, Community Development Teams in offering opportunities for the delivery of aspired *civil* protection related community resilience outcomes. Deeply embedded in the affected communities, these staff were initially forced into *ad hoc* Frontline Recovery Work (FLRW). Here their local knowledge proved invaluable in coordinating the identification of, and in directing assistance toward, the most severely affected during the dynamic post-event period. With their community connectedness and brokering skills recognised, they have since worked alongside the LRF partners and local voluntary sector groups and organisations to promote wider community engagement with resilience building. At a crucial time, this team offered emergency managers trusted linkages into grass-roots community networks. With their skill-sets attuned to reducing social vulnerabilities through the enabling of greater community competence, their example clearly illustrates the need for staff with community-embedded practice to be better integrated into civil-protection institutions.

### **Introduction**

In the disasters literature, the word *aftermath* is used to denote the predominantly negative consequences of a hazard event. Yet in old English the same term is used to describe the green shoots that emerge in natural succession from a grass field after it is cut (Macfarlane, 2015). Applying this second, more positive and perhaps more resilience-relevant framing to hazard consequences, this paper focuses on a specific finding from one EU project case study to illustrate the importance of 'social protectors' in facilitating hazard-affected communities' 'green-shoot' resilience processes.

Whilst the modern use of the concept has its roots in the engineering, ecological-systems and psychology literatures (Alexander, 2013), there has been an increasing focus in policy circles on the

idea that ‘resilience’ constitutes an important factor in society’s ability to withstand, cope with, adapt to and recover from natural hazards and other threats (The National Academies, 2012, Comfort et al., 2010, Coles and Buckle, 2004, Norris et al., 2008). Over the past decade in the UK this concept has become ingrained into civil protection policy, as representing an aspirational foundation upon which communities can be empowered (Cabinet Office, 2011c) and critical infrastructure, businesses and public services more effectively managed (Cabinet Office, 2011a, DoH, 2008, Home Office, 1999).

At its simplest, the application of resilience as a descriptive social concept is perhaps best understood as relating to a social system’s ability to ‘bounce back’ or, more preferably, to ‘bounce forward’ (Manyena, 2011) after a disturbance. However, resilience has also been identified as being used in governmental discourses as a normative or *boundary* concept (Brand and Jax, 2007) with which to push responsibility for risk away from the state and onto individuals and institutions (Welsh, 2014). From this perspective, individuals, households and communities that are not seen to ‘bounce back’ after disruptive events are projected as victims of their own lack of self-reflectivity and adaptability in an uncertain world, rather than as victims of a failure of government action (Chandler, 2014). Despite these critiques, attempts have been made to use a resilience lens to investigate why some ‘communities’ are able to cope with disturbance more effectively than others. For this analysis, we understand social differentiation that occurs within a population as reflecting the presence of different communities and the resilience of these communities as ‘community resilience’. Accordingly, we need to point out that, rather than focus on one specific type of community, our discussion points should be understood as encompassing, at any one time, one or more of the types defined in the emBRACE typology (i.e. geography, interest, circumstance, support, identity: emBRACE, 2012: p.35)<sup>1</sup>

To understand community resilience, Norris *et al.* (2008) have proposed that consideration must be given to the interpretation of complex interactions between built, natural, social and economic environments. With community resilience, in their eyes, a metaphor that is inherited within “*a process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance.*” (Ibid., p.130). Such an underpinning complexity is also acknowledged in Twigg’s (2009) guidance on community disaster resilience assessment that, amongst other things, proposes the need for anyone wishing to understand a community’s resilience to clearly account the resources and capacities they have access to. Such suggestions illustrate an interesting cross-over between the burgeoning resilience literature and the Sustainable Livelihoods (SL) literature of the early 1990s (Chambers and Conway, 1991), which introduced the idea that to be sustainable communities need access to and capacities to mobilise a full range of capital resources (human, physical, etc.). Interestingly, resources and capacities also have a history of underpinning the process of community development within assets-based approaches (Kretzmann and McKnight, 1993) and as an important mechanism through which to manage poverty and its associated vulnerabilities (Siegel and Alwang, 1999). This adoption of resource and assets-based approaches across both civil and social protection spheres suggests that what we call ‘community resilience’ is

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<sup>1</sup> The emBRACE typology defines communities in terms of: geography (i.e. place), interest; circumstance (e.g. hazard affected); support; identity. In terms of hazard exposure it could be argued that geography is the most important defining factor (e.g. a community of people living on a floodplain). However, our suggestion is readers should consider whether individuals could belong to just one, or several, of these community types at any one time.

related to much more than simply a population's effectiveness in responding to (e.g.) the broadcast of a hazard warning message (Drabek, 2000) and more to do with understanding broader issues of social capability, equity and sustainability (Chambers and Conway, 1991). In effect resilience becomes a divisive issue, whereby an important understanding can be reached, that those with greater access to a wider range of resources will likely have more resilience (in terms of being better able to 'bounce forward') than those lacking such access (Ritchie and Gill, 2011).

Effectiveness in the mobilisation of resources and capacities can be used to explain the concept of *inherent* resilience, which addresses a community's ability to use these assets to directly buffer impacts (Tierney, 2014). One particularly important aspect of inherent resilience has been suggested as the existence of social infrastructure, which can serve as a safety net, both during normal times and during a crisis. This focus on social infrastructure and in particular the relative importance of a balance between close bonding, lateral bridging and hierarchical linking social networks has also been identified by Aldrich (2012) as a key determinant of effective recovery. Aldrich suggests that communities with high levels of, particularly, bridging and linking assets are more effective at facilitating their own recovery, whilst those with only tightly bonded and exclusive networks or high levels of social isolation do not fare so well. Such an understanding crosses directly back into the broader issue of how social protection has been traditionally delivered, i.e. through using community development as a mechanism through which to enable local populations to, both, advocate for desired outcomes on their own behalf, whilst also providing safety nets for their own vulnerable members (Ledwith, 2005). The point being that by taking this perspective it becomes clear that some of a hazard-affected community's aftermath outcomes be founded within the capabilities of existing social networks. However, adding a community development perspective also introduces the potential importance of practitioners who may operate at the boundaries of community networks (Wenger, 2000) and who may be able to guide and facilitate the members of affected networks in order to enhance the recovery capacity of *all* those affected. On this second point, therefore, the argument put forward is that people working in practice-based community development roles should be regarded as bearing, both, important civil *and* social protection responsibilities (Notcutt and Davis, 2014).

Perhaps a little overdue, it of course now important to explain exactly what we mean when we talk about these two protection related concepts:

...*civil protection* refers to the "organisation and measures, under governmental or other authority, aimed at preventing, abating or otherwise countering the effects of emergencies for the protection of the civilian population and property" (Cabinet Office, 2013)

...*social protection* refers to: 'the public actions taken in response to levels of vulnerability, risk and deprivation, which are deemed socially unacceptable within a given polity or society.' (Norton et al., 2001: p.7)

Taking these two concepts and framing them as both resilience related brings a differentiation sharply into relief. This is because we consider hazards and emergency<sup>2</sup> events as a part of normal

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<sup>2</sup> The UK Civil Contingencies Act (2004) defines an emergency as: "An event or situation which threatens serious damage to human welfare in a place in the UK. An event or situation which threatens serious damage

life (Perry and Quarantelli, 2005), which may require their impacts to be [partially] mediated by access to resources and capacities (just as the impacts of deprivation are mediated by such access: Wisner et al., 2004). Taking this perspective, it becomes easier to understand that the most resilient communities would be those whose social protection actors are equally as informed and physically and mentally prepared for emergency-related roles as their civil protection providers. This is because, whilst the normal routines and practices of social protection actors may be ordinarily challenging (e.g. dealing with deprivation on a day-to-day basis), the escalated intensity and longevity of post-emergency ‘frontline recovery work’ can place unprecedented pressure on the unprepared. This, in turn, can impact on their efficacy in assisting ‘their’ impacted community back to functioning, as well as affecting their own health (Phillips, 2009, Convery et al., 2007). In other words, in order to propagate the aftermath effectively key professionals who will be involved in the recovery, ideally, need to be prepared for these roles.

The idea has now been introduced that community resilience to hazards (and other emergencies) requires the nurturing of that community’s ability to mobilize resources and capacities, not just in preparing for and responding to the event, but during recovery too. It has also been suggested that community resilience (in terms of capacity to recover) is partially inherited within a community’s existing social networks, but also in the ability of key individuals to facilitate the recovery of the *whole* community through the extension of their social protection practices and community development approaches. Having built this argument, the next section will provide a short description of the UK civil protection structure through which emergencies are managed, before introducing the case study site in Cumbria upon which this analysis is based. The discussion will then move on to examine the ‘frontline recovery work’ (FLRW) role in general, before exploring the experiences of a particular team of ‘social protectors’ who have become embedded in the delivery of civil-protection outcomes in Cumbria, UK, in particular. Conclusions will then be drawn.

## UK Civil Protection context

In the UK, civil protection is delivered through a tiered approach, from national to local. At the local level this is achieved through the collaboration of a range of organisations and agencies designated as ‘Responders’ under the Civil Contingencies Act 2004. Category 1 responders include the ‘Blue Light’ emergency services (Police, Fire and Ambulance), as well as other actors, such as the Environment Agency, public health trusts and local authorities (HM Government, 2012)<sup>3</sup>. These organisations cooperate and conduct a series of Integrated Emergency Management (IEM)<sup>4</sup> duties as members of a collective Local Resilience Forum (LRF). In order to perform their duties LRF members are also required to “*have regard to the activities of relevant voluntary organisations*” (Ibid., p.47), which primarily means close local collaboration with 3<sup>rd</sup> sector groups such as (e.g.) Mountain Rescue Teams and the Red Cross, rather than with more general civil society charity groups (Cabinet Office and VSCP, 2007). During an emergency (see footnote) overall responsibility for coordinating the response operations is normally conferred to the Police, however, for recovery management

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to the environment of a place in the UK., War, or terrorism, which threatens serious damage to security of the UK.”

<sup>3</sup> Category 2 responders include public and private-sector bodies (e.g. utilities companies) who are likely to be heavily involved in emergencies and who can assist Cat 1 responders in the performance of their duties (under the Act)

<sup>4</sup> The six phases of IEM: Anticipation, Assessment, Prevention, Preparation, Response, Recovery Management

overall responsibility for strategic coordination is passed to the Local Authority. This transfer of responsibility provides an acknowledgement that recovery management is understood as a community-supportive process, which is conducted *with* the affected community and with the assistance of a complex range of frontline recovery workers (HM Government, 2007).

## Case study site

The emBRACE project's *Floods in Northern England* case-study<sup>5</sup> was developed in order to investigate what community resilience 'looked like' as it was experienced by the population residing along the course of the River Derwent in Cumbria, UK. The case study site comprised the part of the Derwent catchment that accommodates the river and a tributary, the River Cocker, as they flow from their sources in the Lake District Fells in Borrowdale, St John's in the Vale and Lorton Vale, through the towns of Keswick and Cockermouth and out into the Irish Sea at Workington (Figure 1).

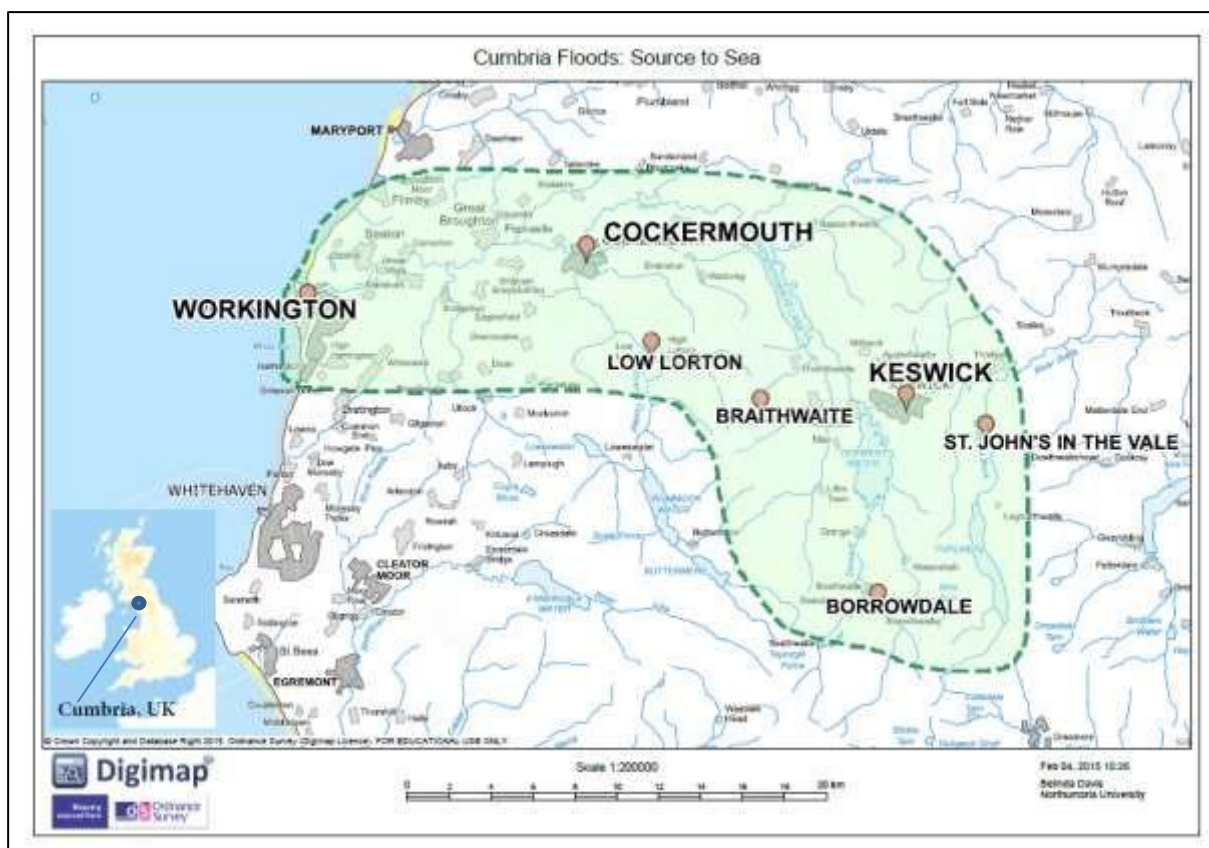


Figure 1: emBRACE project case-study locations along the Derwent Catchment, Cumbria UK

Keswick is the first settlement of notable size along the River Derwent. The town is situated beside Derwentwater, where the so named river outflows before its confluence with the River Greta. This proximity to two rivers and its low relative topography meant that parts of the town suffered severe flood impacts to residential and commercial properties during floods in both 2005 (198 buildings) and 2009 (300 buildings). Cockermouth is situated at the confluence of the River Derwent and the

<sup>5</sup> <http://www.embrace-eu.org/case-studies/floods-in-northern-england>

River Cocker. As with Keswick, this position makes the town vulnerable to flooding from either of the rivers or from a combination of the two. Accordingly, the lower-lying areas of the town have a long history of flooding and in recent years one area, The Goat, has been subjected to three separate flood inundations culminating in the 2009 event. The flow confluence that occurred in 2009, however, was of a different magnitude than these earlier events (and historically unprecedented), with depths in the vicinity of Main Street reaching 2.44m, and required ~200 people to be rescued in a highly dynamic multi-agency operation that became the focus of national media attention (Environment Agency, 2010). Workington is situated at the mouth of the River Derwent, where it flows into the Irish Sea. As such, this area was the last to be affected by the flood pulse as it flowed down the catchment. Without doubt the most significant impact to manifest in the town was the collapse of Northside Bridge and the resultant death of Police Constable Bill Barker; the only fatality directly attributed to the event (Cumbria Resilience, 2011b). The loss of this bridge and the critical damage to two others along this short river reach, effectively sliced the town in two. Almost overnight residents and businesses were faced with a one and a half hour detour, along a 14-18 mile round trip via Cockermouth, to get between parts of the town that sat facing on opposite sides of the river. However, the fact that the bridge failures garnered the highest levels of media, as well as local, attention at this end of the catchment should not detract from the fact that 60-70 dwellings were also directly affected by flood water.

Whilst the research included the investigation of resilience in some rural areas and villages along the catchment, the focus of this paper is on the role of a specific team of local authority staff, who found themselves operating in the midst of the recovery efforts in these three towns.

## Methods

This paper draws on primary research data that was collected as part of a case study within the EU emBRACE project<sup>6</sup>. This case study designated the flooding that affected large parts of Cumbria in November 2009 as a 'key event' (Robson, 2005) in need of investigation. During the investigation a total of 65 interviews were conducted, seven resilience-focussed public meetings were attended and three separate project workshops were held. Research participants represented a range of interests, from directly flood-affected residents (rural or town) and members of community groups with interests in community resilience (40), to representatives of high-level governance institutions within the county (25), including staff from Category 1 and 2 responder organisations. Qualitative analysis of the accumulated data, using Qualitative Data Analysis (QDA) software and a grounded theory approach (Strauss and Corbin, 1998), resulted in the identification of a range of community-resilience relevant themes, which have been discussed in detail in the full project report (Deeming et al., 2015). This paper focuses on one specific theme related to the role played by the Cumbria County Council's Area Support or 'Community Team' in facilitating the county's flood recovery. Where participant's selected quotations have been used to illustrate a point, these have been anonymised.

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<sup>6</sup> [www.embrace-eu.org](http://www.embrace-eu.org)

## Frontline Recovery Work

Following such a high magnitude impact, Cumbria's recovery from the 2009 flood event was achieved through an undoubtedly successful and supportive collaboration between formal responder organisations, businesses and business associations, 3<sup>rd</sup> sector organisations, the faith community and the wider geographical community (Cumbria Resilience, 2011a, Riding, 2011). Although the death of Police Constable Bill Barker proved to be the event's pre-eminent tragedy, the fact that more lives were not lost during the event is in no small part testament to the planning, training, exercising of the County's responder agencies and to the resourcefulness of the communities and community groups they worked alongside. In accordance with civil protection doctrine, as the county moved from response into recovery the leadership authority changed, from the 'Blue-light' services, to those more geared and equipped to engage with the issues of 'vulnerability, risk and deprivation' (i.e. the social protection considerations), which presented as potential consequences for those affected by such an event. Whilst this section singles out for discussion a particular category of Frontline Recovery Worker (FLRW) involved in this activity, this should not be seen as devaluing the efforts of the countless others who 'leaned in' to the recovery work. It is done explicitly to highlight the importance of ensuring that organisations with pre-defined recovery responsibilities understand the value of preparing (e.g. training) all their staff to perform these roles (Convery et al., 2007).

Before focussing on specific staff, however, it is important to define what is meant by the term Frontline Recovery Worker (FLRW).

### FLRW Role preparedness

In their study of the often arduous and traumatic work carried out by seconded and reassigned staff during the 2001 Foot and Mouth disease (FMD) crisis in Cumbria, Convery et al. (2008) found that when it comes to dealing with emergencies "*the frontline often emerges in unexpected places*" (Ibid., p.114). By this they meant that temporary staff being exposed to the *abnormal* working conditions that can be experienced in a 'disaster zone' can encounter significant stress and feel psychological strain, which they would not expect as part of their normal employment routines. The principle identified was that in emergency or post emergency situations, frontline workers may not always have had the training or situational exposure sufficient to prepare them for their roles.

This does not mean that the pressures of emergency work do not affect fully trained 'Blue light' employees (North and Hong, 2000)<sup>7</sup>, the point is made simply to highlight the fact that organisations should be mindful that their staff may be deploying as potentially untrained and unprepared for frontline roles, which could have welfare consequences for them later. In the UK, guidance on the care of and the consideration of frontline worker issues implicitly introduces the idea that LRF members should integrate FLRW welfare provisions into their own business continuity arrangements, and could also encourage them to prompt 3<sup>rd</sup> sector, business and community collaborators to do the same (HM Government, 2013). However, what the Cumbria research has revealed is that there still remains a challenge to how organisations recognise whose tasks actually constitute Frontline Recovery Work.

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<sup>7</sup> Psychological strain resulting from emergency roles has been referred to as a normal response to abnormal events.



Following a high magnitude flood, which affected the City of Hull in north east England in 2007, Whittle et al. (2010) identified four types of Frontline Recovery Worker:

1. Permanent and temporary staff whose jobs were created specifically to deal with the issue of flood recovery. In Hull these included staff employed on the City Council's Flood Advice Service.
2. Those whose pre-existing job roles were extended to deal with flooding issues. The best example of this in Hull was the work of the City Council's Community Wardens.
3. "Traditional" intermediary roles, e.g. the work of the loss adjusters and the Citizen's Advice Bureau.
4. Informal work that was carried out in a voluntary capacity by community groups across the city.

Interestingly in Hull, many of those involved in these types of expanding, extending or emergent work roles (Brouillette and Quarantelli, 1971) found the experience to be very positive, with perceived rewards including enhanced skills and CVs as well as the feelings of purposefulness that came with helping people they thought to be in need. For those in Hull who held the dual roles of recovery worker and 'Floodee'<sup>8</sup>, the experience of helping others allowed them empathise more, but also to be more reflective about their own hardships. It needs to be clearly stated, however, that those who were forced by circumstances to carry out this dual role, found the overall experience to be extremely arduous. As well as positive outcomes, FLRWs also experienced considerable role-related stresses. These included feelings of not receiving adequate support from their employers and there was also a lack of debriefing opportunities. This was highlighted as representing two negatives: these workers felt they were lacking an opportunity to 'let off steam' with their colleagues; and they felt this lack of debriefing meant that organisations were missing an opportunity to learn from their workers' experiences (Deeming et al., 2011).

To consider these positive and negative experiences we will now turn our attention to a particular group of FLRWs whose own mixed experiences were analysed during the emBRACE research.

### **Local Authority 'Community Teams' as key FLRWs**

One group of 'Type 2' FLRWs (i.e. extension of existing roles) in Cumbria were the members of the County Council's Area Support Team, or 'Community Team'. As a community based, public-facing branch of the County Council the community team comprises a small group of council officers who are specialists in community engagement and community development practice. Following the 2009 flood the team members situated in the towns along the Derwent catchment found themselves at the forefront of recovery activity. Deeming et al. (2015) reflect on these individuals' FLRW roles and synthesise their key role experiences. As in Hull these included positive effects in terms of...

- ...feeling personally empowered, by the perceived success of their brokering/enabling work
- ...feeling positive about sensing themselves part of a community that was perceived to have come back stronger, more capable and more connected from the experience.

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<sup>8</sup> 'Floodee' was a phrase coined in Keswick to describe those who had been flooded. It was regarded as preferable and more empowering than the often applied terms, flood 'victim' or flood 'survivor'

As in Hull, however, these positive experiences were also balanced by more challenging issues related to role stress:

- The unanticipated nature of the new FLRW role that emerged from the event, i.e. it required much more than the 'day job'
- The variety of the brokerage activity that these staff were involved in
- The length of time the activity continued after "all the other organisations left"
- The sheer intensity of the work (never feeling 'off duty' for months)
- The pressure this intense work placed on the workers' home life

During the recovery, these staff laboured at the frontline to coordinate the contribution of the statutory, 3<sup>rd</sup> Sector, business and community sectors into a coherent recovery process.

"Our role was to coordinate the uncoordinatable" Interviewee C36

Whilst this challenge played heavily on their community development praxis (i.e. they enjoyed this coordination role, because it was effectively what they were used to...only more intense), one subtext that emerged was that they did not always perceive that the importance of their place in this coordination task was appreciated by their supervisors. For example:

C38 "...crime, or properly probably fear of crime, was a big thing. So we worked with the Police and we had smart water tagging for property and that eased some of that.

Q So [they] set up a Recovery Coordinating Group?

C38 Yeah and the idea was that that fed in, up the structure; that didn't work as well as it could have done. Information went up; information didn't come down very well. So that was quite difficult. It was very much a respond to what comes up on the ground rather than a proactive planning. "How do we cope with this?"

Interviewee C38

Regardless of this perceived separation from top-down planning processes, it could be said that, these officers' networking skills were vital in operationalising the County-Council led Strategic Recovery Group's (SRG) vision of recovery (Cumbria Resilience, 2011a). Also despite this apparent disconnect, the fact is that these officers were effectively engaged in delivering recovery from "the perspective of community development", which is interesting, because this is an approach that has always been recommended in government guidance for Local Resilience Forums (Cabinet Office, 2011b: p.60). In the opinion of the officers who were interviewed, this apparent invisibility is specifically practice related and due to their 'community-development' skillset being founded in: 1) the capacity of community development professionals to operate largely autonomously, and; 2) these individuals' ability to connect people with resources (social, physical, etc.) without seeming to be the ones doing it (Pitchford, 2008), i.e. they are in effect highly trained social-network facilitators (Gilchrist, 2003), or what Wenger (2000) terms 'brokers'. This is interesting, because whilst previous disasters have resulted in an understanding that social workers need to be prepared for their likely role in helping *individuals* recover from traumatic events (Newburn, 1993), the fact that these officers were using their skills to connect and empower an affected community (i.e. seeding the aftermath), rather than in simply supporting individuals, apparently meant that the value of their brokerage was harder for others to appreciate. In community of practice theory 'brokerage skills'

are particularly highly valued in the development of effective working relationships (Wenger et al., 2002), but because of the nature of their role the networking *effect* achieved by these people is often overlooked, even though the *outcomes* of their interventions may be quantifiable (e.g. the effectively coordinated delivery of services to vulnerable community members by volunteers). Returning to Norris *et al.* (2008) who define the linkage of adaptive capacities as a metaphorical illustration of community resilience, we argue here that the presence of these network brokers represents an actual manifestation of this linkage potential.

Perhaps surprisingly, an interesting analogy to this type of working is presented by the US Coast Guard and its response to Hurricane Katrina (Ripley, 2005). After the storm struck the Gulf Coast in 2005, the US Coast Guard were praised for their contribution to the response effort (US Senate, 2006). This success was later attributed to the fact that the Coast Guard (unlike most other US Federal Agencies) operated a degree of 'control slack' (Schulman, 1993), which provided individuals and crews with a capacity to operate through "a principle of on-scene initiative" and without the usual constraint of top-down command and control structures of coordination and decision-making expected in the uniformed services:

"Even though the Coast Guard is chronically underfunded and poorly equipped, it performs well during crises because it "trusts itself"; lower-level personnel are empowered to act on the basis of their own situation assessments and do not have to seek clearance from superior officials, making for a decentralised, rapid, and flexible response" (Tierney, 2014: p.216).

What appears to have occurred after the 2009 floods in Cumbria was that the Community Team officers were able to take advantage of both, the 'control slack' in their team's management system, and their own resourcefulness and 'brokering' skills to produce innovative recovery outcomes for their communities. Perhaps also surprising is that during this current phase of austerity this type of staff resourcefulness is something that is increasingly desired by the Council in terms of how its Community Teams and other services operate. The apparent ethos being that if officers are trusted to act with greater autonomy (relying on their skillsets and judgement, rather than via top-down instructions), it offers administrative savings:

"...we've now got the hard bit of actually stopping our services, changing the way we do it. And so, quite rightly, senior management has introduced this change-management programme to actually focus on how we empower our staff. And it's how we get away from this top-down culture [...] it's having that ability to say to the crew of a boat, there you go, I'm going to step out of the boat and I'm going to meet you around the other side of the lake. Get yourselves there. And let the natural leaders or the group work it out together"

Interviewee C24

Returning to the issue of inherent community resilience, what the Community Team's experience during flood recovery reinforces, therefore, is the need for those organisations with broadly defined civil and social protection responsibilities to understand who their staff with these brokering community development and/or community engagement responsibilities and skillsets are and to decide on what is a suitable degree of control slack to attribute to their activities. Once this is understood, these individuals should be actively encouraged to anticipate and plan for how their skills might be usefully integrated into contingency plans. Again, here Cumbria provides a useful

example, because in response to the institutional learning that occurred following the 2009 flood recovery, the role profile of the Community Team officers was amended to explicitly include provisions related to duties during emergencies. What this has achieved is to formalise the acknowledgement within the Council (as a Cat 1 responder) of its moral obligation to sensitise, train and provide welfare contingencies for its community-engaged staff in case a future emergency should again extend their normal work practices. Also, however, it has placed an onus on those staff to seek out information for themselves as to what their emergency roles might include. Such dual- aspect preparedness promises to both reduce the risk of individual staff becoming overburdened by future emergency role extension (Phillips, 2009) and also offers an opportunity to embed and normalise civil-protection thinking into the day-to-day delivery of a wider range of community- focussed services than before (Notcutt and Davis, 2014). Broadening the advocacy of civil- protection thinking across all the community-engaging staff employed by these organisations may also result in additional resilience benefits. With their networking skills, these benefits might include such staff devising new and innovative approaches to the increasingly problematic task of identifying and supporting vulnerable households during and after emergencies (Mellor, 2014). Here a final example from Cumbria involved a community officer being instrumental in tasking and coordinating the Cockermouth ‘Street Angels’, a group of volunteers who patrolled the town’s flood-affected areas offering food, assistance and empathy, whilst also reporting back any concerns they had (e.g. related to suspected secondary health impacts), to the coordinator.

## **Conclusion**

This paper has used an old English interpretation of ‘aftermath’ as a frame to understand certain aspects of three case-study communities’ intrinsic capacities for resilience, as it was revealed following the 2009 high-magnitude flood in Cumbria, UK. From this, it was argued that such resilience is inherited within a given community’s capacity to recover and, specifically in terms of its members’ ability to access and mobilise a range of resources in order to do so. The importance of social networks in this process was highlighted, and a proposal made that professional community development practice offers a mechanism through which communities’ networking capacity (and resilience) might be enhanced. The differentiation between civil and social protection roles has then been discussed, the point being that hazard-affected communities’ civil and social ‘protectors’ may each provide important supportive capacity for the vulnerable affected, through the frontline work they do. The benefits and challenges of frontline recovery work were then discussed, to ensure an understanding that these roles need to be prepared for and resourced. Finally, the focus shifted back onto community development practitioners, in order to propose the importance of both, their brokering role and their institutionalised autonomy in propagating affected communities’ recovery from adversity.

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## References

- ALDRICH, D. P. 2012. Building Resilience: Social Capital in Post-Disaster Recovery, Chicago, The University of Chicago press.
- ALEXANDER, D. 2013. Resilience and disaster risk reduction: an etymological journey. *Natural Hazards and Earth System Sciences, Discussion*, 1257-1284.
- BRAND, F. S. & JAX, K. 2007. Focusing the Meaning (s) of Resilience : Resilience as a Descriptive Concept and a Boundary Object. *Ecology*, 12.
- BROUILLETTE, J. R. & QUARANTELLI, E. L. 1971. Types of Patterned Variation in Bureaucratic Adaptations to Organizational Stress\*. *Sociological Inquiry*, 41, 39-46.
- CABINET OFFICE 2011a. Keeping the Country Running: Natural Hazards and Infrastructure. London.
- CABINET OFFICE 2011b. The role of Local Resilience Forums: A reference document. London: Cabinet Office.
- CABINET OFFICE 2011c. Strategic National Framework on Community Resilience. London: HMG.
- CABINET OFFICE 2013. Civil Protection Lexicon: A developing single point of reference for UK Civil Protection terminology (Version 2.1.1). London: Cabinet Office.
- CABINET OFFICE & VSCP 2007. Voluntary Sector Engagement: Guidance Note. London: Cabinet Office for the Voluntary Sector Civil Protection Forum.
- CHAMBERS, R. & CONWAY, G. 1991. Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. Brighton, UK: Institute of Development Studies (IDS).
- CHANDLER, D. 2014. Resilience: The Governance of Complexity, Abingdon, UK, Routledge.
- COLES, E. & BUCKLE, P. 2004. Developing community resilience as a foundation for effective disaster recovery. *The Australian Journal of Emergency Management*, 19.
- COMFORT, L. K., BOIN, A. & DEMCHAK, C. C. 2010. Designing Resilience: Preparing for Extreme Events, University of Pittsburgh Press.
- CONVERY, I., MORT, M., BAILEY, C. & BAXTER, J. 2007. Role Stress in Front Line Workers during the 2001 Foot and Mouth Disease Epidemic: the value of therapeutic spaces. *The Australasian Journal of Disaster and Trauma Studies*, 2007/2.
- CONVERY, I., MORT, M., BAXTER, J. & BAILEY, C. 2008. Animal disease and human trauma: Emotional geographies of disaster, Basingstoke, UK., Palgrave Macmillan.

CUMBRIA RESILIENCE 2011a. Cumbria Floods November 2009 Learning From Experience: Recovery Phase Debrief Report. Carlisle: Cumbria County Council.

CUMBRIA RESILIENCE 2011b. Cumbria Floods November 2009 Learning From Experience: Recovery Phase Debrief Report. Carlisle: Cumbria County Council.

DEEMING, H., DAVIS, B., FORDHAM, M. & TAYLOR, R. 2015. emBRACE WP5 Case Study Report: Floods in Northern England. Newcastle-upon-Tyne, UK: Northumbria University for the emBRACE Project

DEEMING, H., WHITTLE, R. & MEDD, W. 2011. Recommendations for changes in UK National Recovery Guidance (NRG) and associated guidance, from the perspective of Lancaster University's Hull Flood Studies. Lancaster University, UK.

DOH 2008. The NHS Resilience and Business Continuity Management Guidance 2008: interim strategic national guidance for NHS organisations. Department of Health, National Health Service.

DRABEK, T. E. 2000. The Social Factors that Constrain Human Responses to Flood Warnings. In: PARKER, D. J. (ed.) Floods. London: Routledge.

EMBRACE 2012. Deliverable 1.1: Work Package 1 - Early Discussion and Gap Analysis on Resilience. EU FP7 emBRACE Consortium.

ENVIRONMENT AGENCY 2010. Cumbria 2009 Floods: Lessons Identified Report. Bristol: Environment Agency.

GILCHRIST, A. 2003. The Well-Connected Community: A networking approach to community development, Bristol, UK, The Policy Press.

HM GOVERNMENT 2007. National recovery guidance: recovery plan guidance template. London: HM Government.

HM GOVERNMENT 2012. Emergency Preparedness: Guidance on Part 1 of the Civil Contingencies Act 2004 Her Majesty's Government, Cabinet Office.

HM GOVERNMENT 2013. Emergency Response and Recovery: Non-statutory guidance to complement Emergency Preparedness (5th Edn.). London: HM Government.

HOME OFFICE 1999. Business as usual: maximising business resilience to terrorist bombings. London: Home Office.

KRETZMANN, J. P. & MCKNIGHT, J. L. 1993. Building Communities from the inside out: A Path Toward Finding and Mobilizing a Community's Assets, Chicago, ACTA publications for the Asset-Based Community Development Institute.

LEDWITH, M. 2005. Community Development: A Critical Approach, Bristol, BASW/Policy Press.

MACFARLANE, R. 2015. Landmarks, London, Hamish Hamilton.

- MANYENA, S. B. 2011. Disaster resilience: a bounce back or bounce forward ability? *Local Environment*, 16, 417-424.
- MELLOR, D. 2014. *Planning for the Needs of Vulnerable Adults in Emergencies*. Easingwold, UK.: Emergency Planning College.
- NEWBURN, T. 1993. *Disaster and After: Social Work in the Aftermath of Disaster*, London, Jessica Kingsley Publishers.
- NORRIS, F., STEVENS, S., PFEFFERBAUM, B., WYCHE, K. & PFEFFERBAUM, R. 2008. Community Resilience as a Metaphor, Theory, Set of Capacities and Strategy for Disaster. *American Journal of Community Psychology* 41, 127-150.
- NORTH, C. & HONG, B. A. 2000. Project CREST: a new model for mental health intervention after a community disaster. *American Journal of Public Health*, 90, 1057-1058.
- NORTON, A., CONWAY, T. & FOSTER, M. 2001. *Social Protection Concepts and Approaches: Implications for Policy and Practice in International Development*. London: Overseas Development Institute.
- NOTCUTT, H. & DAVIS, J. 2014. Community resilience work in Great Yarmouth: a neighbourhood and community development approach. *Practice Insights*, Winter 2014, 12-14.
- PERRY, R. W. & QUARANTELLI, E. L. (eds.) 2005. *What is a Disaster? New Answers to Old Questions: International Research Committee on Disasters*.
- PHILLIPS, B. D. 2009. *Disaster Recovery*, London, CRC Press.
- PITCHFORD, M. 2008. *Making Spaces for Community Development*, Bristol, UK, Policy Press.
- RIDING, K. 2011. The role of the third sector in helping communities in Cumbria recover from the November 2009 floods. Penrith, UK: Cumbria Voluntary Services.
- RIPLEY, A. 2005. *How The Coast Guard Gets It Right: Where did those orange helicopters come from, anyway? The story of the little agency that could* Time Magazine. New York.
- RITCHIE, L. A. & GILL, D. A. 2011. The Role of Community Capitals in Disaster Recovery [Online]. Available: <http://restoreyoureconomy.org/mar-30-2011-about-public-entity-risk-institute-peris-online-symposium-in-march-2011/> [Accessed 13/05/13].
- ROBSON, C. 2005. *Real World Research 2nd Edn*, Oxford, UK, Blackwell.
- SCHULMAN, P. R. 1993. The Negotiated Order of Organizational Reliability. *Administration and Society*, 25, 353-372.
- SIEGEL, P. B. & ALWANG, J. 1999. *An Asset-Based Approach to Social Risk Management: A Conceptual Framework*. Social Protection Unit, The World Bank.
- STRAUSS, A. L. & CORBIN, J. 1998. *Basics of Qualitative Research: Techniques and procedures for developing grounded theory*, Thousand Oaks. Ca., Sage.

THE NATIONAL ACADEMIES 2012. Disaster Resilience: A National Imperative. Washington, DC.: The National Academies.

TIERNEY, K. 2014. The Social Roots of Risk: producing disasters, promoting resilience, Stanford, CA, Stanford Business Books.

TWIGG, J. 2009. Characteristics of a Disaster Resilient Community: A Guidance Note. London: Aon Benfield UCL Hazard Research Centre.

US SENATE 2006. Hurricane Katrina: A Nation Still Unprepared. Washington, DC: Report of the Senate Committee on Homeland Security and Governmental Affairs

WELSH, M. 2014. Resilience and responsibility: governing uncertainty in a complex world. The Geographical Journal, 180, 15–26.

WENGER, E. 2000. Communities of Practice and Social Learning Systems. Organization, 7, 225-246.

WENGER, E., MCDERMOTT, R. & SNYDER, W. R. 2002. Cultivating Communities of Practice, Boston, MA., Harvard Business School Press.

WISNER, B., BLAIKIE, P., CANNON, T. & DAVIS, I. 2004. At Risk, Natural Hazards, people's vulnerability and disasters, London, Routledge.